AECOM Environment

Submitted to:
Dana Companies, LLC
Roscoe, Illinois

Submitted by:
AECOM
Middleton, Wisconsin
60316733.001
May, 2014

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List of Acronyms

AOC	Administrative Order on Consent
AAOC	Amended Administrative Order On Consent
bgs	below ground surface
CVOCs	chlorinated volatile organic compounds
D	deep soil vapor extraction well point
Dana	Dana Corporation, Inc. (before 2005), Dana Companies LLC (after 2005)
Cis-1,2-DCE	cis-1,2-dichloroethene
DO	dissolved oxygen
ERD	enhanced reductive dechlorination
GAC	granular activated carbon
gpm	gallons per minute
HCl	hydrochloric acid
HSA	hollow stem auger
HNO_3	nitric acid
I	intermediate depth soil vapor extraction well point
IEPA	Illinois Environmental Protection Agency
JULIE	Joint Utility Locate Information for Excavators, ,Inc.
NPDES	National Pollution Discharge Elimination System
MCL	maximum contaminant level
mg/L	milligrams per liter
ml/min	milliliters per minute
MNA	monitored natural attenuation
mVolts	millivolts
NTU	nephloturbidity units
ORP	oxidation-reduction potential
PCE	tetrachloroethene
PID	photoionization detector
ppbv	parts per billion by volume
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
ROI	radius of influence
S	shallow soil vapor extraction well point
SVE	soil vapor extraction
TCE	trichloroethene
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOCs	volatile organic compounds

Warner	Warner Electric Clutch and Brake
Work Plan	Revised Work Plan on Administrative Order on Consent, dated April 2009
ZVI	zero valent iron

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1.0 Introduction

1.1 Background and Project Purpose

This report summarizes remedial efforts performed at the former Warner Electric Clutch and Brake facility (Warner) in Roscoe, Illinois. The efforts were performed in accordance with the April 2009 Revised Work Plan on Administrative Order on Consent (Work Plan, RMT, 2009a). As this report shows, these efforts have reduced concentrations of volatile organic compounds (VOCs) and chlorinated volatile organic compounds (CVOCs) to levels that allow for this site to transition into a long-term monitored natural attenuation (MNA) program. **Figure 1** shows the location of the former Warner facility, the approximate area of affected groundwater, the Rock River, and the groundwater pump and treat system.

Historically, remedial efforts associated with this project were conducted under an Administrative Order on Consent (AOC) between the U.S. Environmental Protection Agency (USEPA) Region 5 and Dana Corporation (Dana) dated December 28, 1989. The purpose of the AOC was to "reduce contaminant levels in groundwater in the vicinity of the facility to levels set forth in the AOC." After the signing of the AOC, this was accomplished through a groundwater pump and treat system located near the Rock River, approximately 1.25 miles downgradient from the former Warner facility. This system, which operated nearly continuously from 1991 through 2011, became increasingly inefficient and ineffective as concentrations of the CVOCs in groundwater have decreased over time and are now below the National Pollutant Discharge Elimination System (NPDES) effluent limits for the system. However, the reduction in concentrations of CVOCs at the remediation system did nothing to help lower concentrations in the monitoring wells located at the Plane of Performance along Hononegah Road. Additionally, advancements in the state of remedial technology since 1991 allowed for refocusing of remedial efforts at the facility to expedite the attainment of intermediate and long-term cleanup criteria for the project.

Based on these conditions, Dana approached the USEPA and requested an amended AOC that would allow for refocusing remedial activities at the former Warner facility. As part of this effort, Dana developed a work plan to outline the steps that would need to be taken to move the project forward (RMT, 2007). Following USEPA review of the 2007 work plan the 2009 revised Work Plan, which the USEPA reviewed and approved, was issued. The remedial activities, outlined in the 2009 Work Plan and documented in this report, include enhanced reductive dechlorination (ERD), soil vapor extraction (SVE), and groundwater monitoring. These activities have reduced the mass of CVOCs in vadose zone soil and groundwater and enabled better monitoring of the affected groundwater associated with the former Warner facility. Together, these activities will allow for the transition of the project to a long-term to MNA program.

On April 17, 2013 the USEPA issued an Amended Administrative Order On Consent (AAOC) for the project. The AAOC called for completion of on-site remediation through SVE and ERD with off-site remediation by MNA, consistent with the 2009 Work Plan. The AAOC also included two separate groundwater planes of performance (as outlined below), and a long term monitoring program.

The ultimate goal of the remedial effort is to restore groundwater quality to drinking water standards and to enable reuse of the on-site building for commercial or industrial purposes.

1.2 Planes of Performance

As part of the 2009 Work Plan, three new planes of performance were identified and cleanup criteria were developed to aid in assessing the success of the remedial efforts for each plane. **Figure 2** shows the position of the planes of performance, which are described below.

- The concrete floor in the on-site building – At this plane of performance cleanup, criteria have been developed that will be protective of indoor air for commercial/industrial workers. As part of this effort, both sub-slab vapor and indoor air sampling was conducted to assess background conditions and evaluate the attenuative capacity of the concrete floor at the facility. The results of the sub-slab and indoor air sampling effort were used to guide the timing of the operation and shutdown of the full-scale SVE system.
- Site property boundary – At this plane of performance, both the intermediate-term and the long-term cleanup criteria for groundwater quality are developed. The intermediate-term criteria are groundwater concentrations that are protective of infrequent, nonconsumptive groundwater use. The long-term criteria are groundwater concentrations that are protective of potable groundwater, and as a result, are equivalent to maximum contaminant levels (MCLs).
- Rock River boundary at Edgemere Terrace – At this plane of performance, intermediate cleanup criteria are groundwater concentrations that are protective of the Rock River through discharge of groundwater to the river. Cleanup criteria are the lower of the USEPA-approved surface water ecological benchmarks, which are protective of ecological exposures, or ambient water quality criteria, and is protective of human health through ingestion of aquatic organisms and surface water. The long-term criteria are again groundwater concentrations that are protective of potable groundwater, and as a result, are equivalent to MCLs.

1.3 Cleanup Criteria

Table 1 lists the CVOC hazardous constituents (i.e., contaminants of concern) specified in the 1989 AOC for this project. **Table 1** also lists the different cleanup criteria developed in the 2009 Work Plan that apply to the hazardous constituents. The following is a summary of how/where the cleanup criteria apply.

- Long-term Cleanup Criteria – These criteria, also referred to as "limits for hazardous waste constituents" in the 1989 AOC, are based on the Safe Drinking Water Act MCLs. These are the final criteria that need to be met for groundwater cleanup to be considered complete. These criteria need to be met in all long-term monitoring wells.
- Source Area Intermediate Cleanup Criteria – This criterion was developed to judge the success of the ERD program. As outlined in the 2009 Work Plan this criteria is limited to trichloroethene (TCE, 100 micrograms per liter [µg/L]) and applies to the source area monitoring wells (MW-101 through MW-107, see **Figure 3**).
- Nonpotable Intermediate Cleanup Criteria – These criteria were developed for protection of nonpotable groundwater exposures that could occur before the long-term cleanup criteria are met. As outlined in the 2009 Work Plan these criteria are limited to cis-1,2-DCE (cis-1,2-dichloroethene, 6,100 µg/L) and TCE (1,900 µg/L) and apply to the long-term monitoring wells at the property boundary (LTMW-01, -02, -03, and -03A) as well as those upgradient of Hononegah Country Estates (LTMW-04, -05, -06, and -07, see **Figure 4**).
- Surface Water Discharge Intermediate Cleanup Criteria – These criteria were developed for protection of groundwater to surface water discharge at the Rock River. As outlined in the 2009 Work Plan, attaining these criteria allows for discontinuing the operation of the groundwater pump and treat system at Edgemere Terrace. These criteria apply to monitoring wells along Edgemere Terrace (LTMW-08, -09, -10, and -11, see **Figure 4**).
- Indoor Air Cleanup Criteria – These criteria were developed to be protective of commercial/industrial workers within the former Warner facility. Indoor air sampling conducted prior to SVE remedial activities showed that these criteria were met.

2.0 Enhanced Reductive Dechlorination Program

An ERD program was conducted in the source area at the former Warner facility in accordance with the 2009 Work Plan. **Figure 5** and **Figure 6** show the layout of ERD injection galleries.

2.1 Injection Permit and Utility Clearance

Prior to the commencement of injection activities, a Class V Injection Well Inventory Form was completed and submitted it to the Illinois Environmental Protection Agency (IEPA), Bureau of Land. Utility clearance was performed using Joint Utility Locating Information for Excavators, Inc. (JULIE) along with facility representatives to identify subsurface utilities.

2.2 Injection Program

Between March 29 and April 11, 2010, Redox Tech, LLC performed the subsurface injections using their lactate based proprietary ABC+ mixture at 300 injection points. Each point required concrete/asphalt penetration prior to advancing the soil boring to a depth of approximately 35 feet below ground surface (bgs), approximately 10 feet below the water table.

Redox Tech combined the ABC+ mixture in their injection system trailer and then injected the fluid directly into the subsurface through Geobrobe® drill rods installed using track mounted Geobrobe® units, at depths of 35, 33, 31, 29, 27, and 25 feet bgs in each boring. Injection flow rates ranged from 2 to 15 gallons per minute (gpm) at injection pressures ranging from 100 to 500 pounds per square inch.

2.2.1 ABC Mixture

The ratio of the injection solution was approximately 2.9 gallons of ABC+ mixture, 15 gallons of potable water (from the facility water supply well), 25.0 pounds of zero valent iron (ZVI), 3.3 grams of yeast extract, and 13.3 grams of sodium sulfide. Approximately 115 gallons of this mixture were injected into each of the 300 borings during the ERD program.

2.2.2 Injection Galleries

Subsurface injections were performed in five separate galleries, T-1 through T-5, as shown on **Figure 5**. Galleries were positioned over source areas identified using data collected during the passive soil gas survey (RMT 2006), the On-site soil and Groundwater Investigation (RMT 2006), and the Groundwater Screening Program (RMT 2008a). The galleries were constructed such that the injection transects were perpendicular to groundwater flow. Each gallery was approximately 14 feet wide (parallel to groundwater flow direction), with a cumulative length of approximately 500 feet (perpendicular to groundwater flow direction). Three rows of injection points were drilled in each gallery. The injection points offset between galleries to maximize affected groundwater contact with the ABC+ mixture. The following is a summary of the injection activities at each gallery.

- Gallery T-1 is the northwestern most gallery. It consists of 66 injection points. This gallery is positioned upgradient of long-term monitoring well LTMW-01 and source area well MW-107. It was necessary to shift the gallery approximately 30 feet to the north of its original planned position to avoid underground utilities in this area.
- Gallery T-2 is located southeast of T-1 and consists of 22 injection points. Gallery T-2 was positioned upgradient of long-term monitoring well LTMW-02 and source area well MW-106 and was conducted as planned.
- Gallery T-3 is located southeast of T-2 and includes the area of the pilot scale injections. T-3 consists of 81 injection points (not including the 24 injection points from the pilot scale test) and was conducted as planned.

- Gallery T-4 is located along the south wall of the building, downgradient from Gallery T-3 and near the existing SVE system. T-4 was realigned to accommodate the SVE system and extended to the southeast outside of the building in this area. T-4 consists of 68 injection points and was conducted as planned.
- Gallery T-5 is located in the asphalt parking area south of the building and downgradient from galleries T-3 and T-4. T-5 consists of 63 injection points and was conducted as planned.

Upon completion each injection boring was abandoned using bentonite chips and benseal® to within 1 foot of the ground surface. The abandoned locations were then completed using a concrete grout mix or cold mix asphalt patch.

2.3 Supplemental Injection Program

In August 2013, following a rise in TCE concentrations in monitoring wells MW-103 and MW-104, Dana elected to conduct a supplemental ERD injection program with two focused injection galleries as shown in **Figure 6**.

To maintain consistency with the 2010 injection program, the same chemical suite and injection contractor were used. Between August 12 and 16, 2013, Redox Tech, LLC performed the subsurface injections using their proprietary ZVI and buffered lactate solution (ABC+) at 39 injection points in two separate injection galleries depicted in **Figure 6**. Each point received approximately 202 pounds (lbs.) of ABC and 186 lbs of ZVI (or ~388 lbs of ABC+). Each point within the building (Injection Gallery 1) required concrete penetration prior to advancing the soil boring. All borings were advanced to a depth of approximately 35 feet below ground surface (bgs), approximately 10 feet below the water table. Injection was then conducted at 2 foot intervals (35, 33, 31, 29, 27, and 25 feet bgs). Details of this effort are presented in the 2013 Third Quarter Progress Report (AECOM, 2013)

3.0 Soil Vapor Extraction Program

In accordance with the 2009 Work Plan, the pilot scale SVE system was expanded to areas within and immediately south of the former Warner facility where passive soil gas sampling had shown elevated mass of CVOC (greater than 50,000 nanograms). This section of the report documents the expansion and operation of the system as well as results from sampling of the SVE system, which showed a dramatic decrease in CVOC concentrations.

The indoor air sampling, conducted before the SVE remedial action was performed, showed CVOC concentrations throughout the facility were below the indoor air cleanup criteria (RMT 2008b). As a result, there was no need to conduct the SVE program from an indoor air exposure stand point. However, because the affected soil in the vadose zone, left unremediated, could represent a source that may have made achievement of the long-term groundwater cleanup criteria more challenging, the SVE vadose zone remediation program was conducted at the facility.

3.1 Soil Vapor Extraction Point Installations

The SVE pilot study showed that the blower could achieve a radius of influence (ROI) of 50 to 70 feet, when connected to approximately 9 to 10 extraction points. Based on this, a series of 26 vapor extraction points were installed at the site and divided into three groups of 8 to 9 points. The groups are summarized below and depicted on **Figure 7**. Five of the extraction points included separate shallow (S) and deep (D) well points (SVE-11, -12, -14, -16, and -18). In addition, the pilot-scale test location (SVE-15) consisted of a shallow, intermediate (I), and deep extraction point. The remaining 13 locations consist of a single extraction point.

Extraction points were constructed of 4-inch-diameter, Schedule 40 polyethylene vinyl chloride (PVC), with 5- to 10-foot-long screens. Well screens have 20 slot (0.020-inch) openings and were positioned 10 to 20 feet below grade in the 13 single extraction point installations, and at 4 to 9 and 15 to 20 feet below grade in the nested extraction point installations. The borehole annulus outside the well screen was backfilled with coarse filter-pack material to a depth of 1 to 2 feet above the well screen. A hydrated bentonite clay seal (3/8-inch bentonite chips) was placed above the filter pack. At the top of the installation each well point was equipped with a flush mount installation that was sealed to the floor with concrete.

3.2 Soil Vapor Extraction Point Groupings

Once the extraction point installation was completed, each well was valved and piped to a manifold system to allow for individual or combined operation. The manifold segregated the extraction points into three separate groups as outlined below:

- Group 1: SVE-1, -2, -3, -4, -6, -7, -10, and -13;
- Group 2: SVE-5, -8, -9, -15S, -15I, -15D, -16S, -16D, and -19; and
- Group 3: SVE-11S, -11D, -12S, -12D, -14S, -14D, -17, -18S, and -18D.

3.3 Soil Vapor Extraction System

Figure 8 presents the process instrumentation diagram for the soil vapor extraction system, which consists of the following components:

- A 60 Horsepower positive displacement rotary lobe type vacuum blower and foot-mounted motor;

- Two vapor-phase, granular-activated carbon (GAC) canisters (diameter 72 inches, height 73 inches), each containing approximately 4,000 pounds VC-Sorb 4 X 8 coconut shell activated carbon;
- Vapor-phase flow meters;
- Vertical silencer; and
- Electrical control panel.

3.4 Soil Vapor Extraction System Operation

The full-scale SVE system began operations on April 15, 2010. Following completion of the overhead header system and a shakedown period of several weeks, routine operations began on May 24, 2010. During this time, two of the extraction point groups listed above would typically be operated together for an approximate period of 2 weeks. At the end of the period, one of the groups of extraction points would be taken off line and the third group would be brought on-line. Cycling operations of the extraction point groups in this manner maximized variation of subsurface air flow regimes. This cycling continued throughout the operation of the SVE system.

System operations were suspended during September and October 2010 when the main seal on the blower began leaking. This required the blower to be removed from the facility for repair and maintenance. Once the blower was repaired and reinstalled, the system was brought back on-line and routine operations were continued. During 2011, the system showed decreasing VOC influent concentrations and on August 25, 2011, the system was shut down to allow equilibrium conditions to be established before final sampling. The system remained shut down until September 14, 2011 when it was restarted for final sampling, which showed that there was no substantial rebound.

3.5 Soil Vapor Sampling Methods

The Joint Construction and Lifetime Operating Permit for the SVE system, issued by the IEPA on January 3, 2008 (permit, I.D. Number 201810AAK), requires the emissions be treated with activated carbon prior to discharge to the atmosphere. The permit also limits the emissions from operation of the SVE system to 8.0 pounds per hr, 0.1 ton per month, and 1.0 ton per year. The permit further specifies that the emission testing must be performed daily for first 3 days of operation, twice a week (biweekly) for next 2 weeks of operation with laboratory analysis to determine the VOC concentrations using USEPA Method TO-14A with gas chromatography. After 2 weeks of operation, less frequent bimonthly (every other month) sampling is required using either a photoionization detector (PID) or analytical sample.

System emission samples were collected in Suma canisters during the first 2 weeks of system operation and analyzed for VOCs using EPA Method 14A by Air Toxics, Inc., of Folsom, California. After the first 2 weeks of operation, samples were collected with a Tedlar bag and analyzed for VOCs using Method TO-14A by PACE Analytical, of Minneapolis, Minnesota. After the first 2 weeks of operation, both influent (pre-carbon treatment) and emission (post carbon treatment) testing was performed on an approximate bimonthly basis while the system was in operation. The samples provided the data needed to evaluate trends in the performance of the carbon treatment, and showed that the system complied with the emissions criteria. To better assess the potential for rebound, where concentrations increase following shut down of an SVE system, the influent samples were typically collected from each group of extraction well points as the group was brought on-line (after that group had been off-line). **Appendix C** contains the laboratory test reports for the SVE testing program.

3.6 Soil Vapor Sampling Results

Table 2 presents a summary of the system emission results. This table shows that the system routinely operated within the permit requirements with a maximum emission rate of 0.182 pounds per hour, more than 40 times below the permitted emission rate.

Table 3 summarizes influent results from the three groups of extraction points prior to carbon treatment. Overall, these results show dramatic reductions in the influent concentrations and reflect remediation of the subsurface vadose zone by SVE. At the beginning of the program, the highest total VOC influent concentration was measured in Group 2 at nearly 1,200,000 parts per billion by volume (ppbv). At the conclusion of the program, concentrations in the Group 2 extraction points was only 42 ppbv. Similar, albeit somewhat less dramatic reductions, were also observed in Group 1 (1,377 ppbv at the start, 6 ppbv at the conclusion of the program) and Group 3 (2,435 ppbv at the start, 143 ppbv at the conclusion of the program). There was very little rebound between the last two sample events, which shows the system had successfully remediated the vadose zone soil.

Given that indoor air sampling, conducted before the SVE remedial actions were performed, showed that CVOC concentrations throughout the facility are below the indoor air cleanup criteria, there was no need to conduct the SVE program from an indoor air exposure stand point. However, because the vadose zone impacts, left unremediated, could represent a source that may have made achievement of the long-term groundwater cleanup criteria more challenging, the SVE vadose zone remediation program was conducted at the facility. Based on this situation, it was judged that the SVE system operation would be shut down when stable influent concentrations, with minimal rebound, were achieved. Further, a reduction in influent (pre-carbon treatment) concentrations by more than 1,000x would represent a very substantial reduction in the mass of remaining CVOCs in the vadose zone. At the conclusion of the SVE system operation these objectives were met. The system had stable influent concentrations that showed and overall average reduction in influent concentration of more than 9,000x.

Overall, the emission sample results show the system met the permit requirements for air discharge of the SVE system, while the influent sample results that the system dramatically reduced the concentration of CVOCs in the vadose zone soil.

Currently the SVE system is shut down. Dana anticipates submitting a request to decommission the SVE system after four additional quarters of groundwater sampling.

4.0 Monitoring Well Installations and Sampling

A new monitoring well network was installed for this project consisting of source area monitoring wells (MW series) and long-term monitoring wells (LTMW series). Well locations were selected after an extensive temporary well groundwater sampling program was conducted to identify the core of affected groundwater at the Planes of Performance outlined above (RMT 2008a). This extensive sampling allowed the long term monitoring well network to focus on 12 locations where monitoring wells were installed. This effort also addressed the monitoring well network along Hononegah Road that was abandoned in 2005 when the road was expanded. The well installations and sampling were completed in accordance with the USEPA approved Work Plan for Installation and Sampling of New Monitoring Well Network and Shut Down of Existing Groundwater Remediation System, submitted to the USEPA, Region 5 in December 2009 (RMT, 2009b).

4.1 Source Area Monitoring Wells

The source area monitoring well network consists of seven wells (MW-101 through MW-107), which are screened approximately 25 to 35 feet bgs, see **Figure 3**. Monitoring wells MW-101 through MW-104 were installed in September 2008 as part of the pilot scale ERD program. Wells MW-105, MW-106, and MW-107 were installed in February 2010 to supplement the initial four wells and extend monitoring to nearby areas where the full scale ERD program would be performed. The source area monitoring wells intersect the core of affected groundwater, and sampling of these wells enables evaluation of the adequacy of the ERD remediation.

4.2 Long-term Monitoring Wells

The long-term monitoring well network consists of 12 wells: LTMW-01, -02, -03, -03A, -04, -05, -06, -07, -08, -09, -10, and -11. **Figure 2** and **Figure 4** shows the locations of the long-term monitoring wells, which are positioned on three separate transects.

4.2.1 On-site Wells at Southern Property Boundary

LTMW-01, -02, -03, and -03A were installed near the southern (downgradient) property boundary. LTMW-01 is screened from 32 to 37 feet bgs and monitors affected groundwater emanating from the area near former TCE vapor degreaser #1231. LTMW-02 is screened from 35 to 40 feet bgs and monitors affected groundwater emanating from the area near passive soil gas sampler PSG-45. Well nest LTMW-03 and LTMW-03A are screened at 25 to 35 feet bgs (water table) and 40 to 45 feet bgs, respectively. This well nest, located at the southern property boundary, intersect groundwater that flows through the area of highest CVOC concentrations emanating from the former TCE storage area.

4.2.2 Wells at Hononegah Road

Individual wells LTMW-04, -05, -06, and -07, were installed within the right-of-way for Hononegah Road to monitor affected groundwater as it flows beneath the Hononegah Estates subdivision. These wells replace the N1, MWCE, MWCM, MWCE, and HEMW series wells that had to be abandoned when Hononegah Road was expanded in 2005. LTMW-05 and LTMW-06 were installed in the core of affected groundwater and screened from 80 to 85 feet bgs, and 65 to 70 feet bgs, respectively. LTMW-04 and LTMW-07 were installed at the margin of the core and screened from 70 to 75 feet bgs to monitor the boundary of the affected groundwater and show any changes in the position of the affected groundwater over time.

4.2.3 Wells at Edgemere Terrace

Individual wells LTMW-08, -09, -10, and -11, were installed near the former groundwater pump and treat system to monitor affected groundwater before it migrates into the organic rich sediment associated with

the Rock River. LTMW-09 and LTMW-10 were installed within the core of affected groundwater and screened from 50 to 55 feet. LTMW-08 and LTMW-11 were installed at the margin of the core and screened from 70 to 75 feet bgs and 80 to 85 feet bgs, respectively, to monitor the boundary of the affected groundwater and show any changes in position of the affected groundwater over time.

4.3 Installation Methods

This section describes the permitting, drilling methods, well construction materials, and well development.

4.3.1 Permitting and Utility Clearance

All of the wells along Hononegah Road and Edgemere Terrace were installed within the public right-of-way for the roads. Right of entry permits for these wells were obtained from the Roscoe Township Highway Department, and well registration forms were completed and submitted to the Winnebago County Health Department per their requirements. Utility clearance was performed through JULIE.

4.3.2 Drilling Methods

Drilling and well construction was performed by On-Site Environmental and Boart Longyear, using a direct push/hollow stemmed augers and mini-rotosonic rig drilling techniques. Oversight and sampling was performed by RMT, Inc. Continuous soil samples were collected and logged to characterize geologic stratigraphy. Drilling was conducted in two phases, the first in September 2008 when the source area wells MW-101 through MW-104 were installed, and the second in March 2010 when the remainder of the well network was installed. **Appendix A** contains boring logs and well construction reports for each of the well installations.

4.3.3 Well Construction Materials and Specifications

Table 4 summarizes well construction specifications. The wells are constructed of 2-inch-diameter, Schedule 40 PVC with threaded, flush-joint casing. Well screens are 5 or 10 feet long (depending on the well depth/placement) with factory cut, 0.010-inch openings (10 slot). After placing the well in the borehole, filter pack material was placed around the base of the well screen and added as the drill casing was withdrawn. The thickness of the filter pack was measured regularly during installation and extended approximately 2 to 3 feet above the top of the well screen. In all wells a bentonite chip seal (5 to 6 feet thick) was placed above the filter pack. In deeper wells a bentonite grout was tremie pumped into the annulus between the borehole wall and the well casing above the bentonite chip seal. In shallow wells, where bentonite grout was not used, bentonite chips were extended from the filter pack to approximately 2 feet bgs. Potable water was used to hydrate the bentonite chips. Finally, a flush mount or stickup protective casing (depending on well location) was installed over the well and sealed with concrete grout. The ground surface was sloped to promote drainage away from the well. The surface completion also included a locking cover to prevent unauthorized entry. **Appendix A** includes Well Completion Reports that give specific information on each well.

Soil cuttings and waste material generated during the well installations were drummed and staged outside of the former Warner facility. Following waste characterization and landfill approval, the soil cuttings were disposed at the Veolia ES Technical Solutions licensed solid waste facility in Menomonee Falls, Wisconsin. **Appendix B** contains disposal tickets from this activity.

4.3.4 Well Development

Each well was developed following installation to improve hydraulic communication with the surrounding aquifer. Development involved the surging of water within the well casing and the removal of a minimum of 10 well volumes until a turbidity of less than 25 nephloturbidity units (NTUs) was achieved. Water generated during well development was disposed in the groundwater treatment system.

4.4 Groundwater Sampling

The source area and long-term monitoring wells have been sampled quarterly since 2010. Samples are collected using low flow purging methods with a positive displacement bladder pump. The decontaminated pump is lowered into each well with dedicated tubing and positioned near the mid-point of the well screen prior to initiating purging activities. Each well is purged prior to sample collection. Wells are purged at a rate of less than 500 milliliters per minute (ml/min) with a drawdown of less than 0.2 feet. During purging the following indicator parameters are measured

- Temperature (±10% degrees C.);
- pH (±0.1 pH units);
- Specific conductance (±10% FS/cm);
- Dissolved oxygen (±0.3 milligrams per liter);
- Reduction/oxidation potential (±10% millivolts); and
- Turbidity (±10 % NTUs);

Purging is complete when 3 successive readings of the field parameters meet the tolerance limits listed above.

After purging, samples are collected directly into prelabeled, laboratory supplied containers, which contain appropriate preservative (VOC samples are preserved with hydrochloric acid (HCl), chromium samples are preserved with nitric acid (HNO_3).

4.5 Laboratory Analysis

Samples are shipped by overnight courier to PACE Analytical of Green Bay, Wisconsin, where the samples are analyzed for the contaminants of concern using EPA Method 8260 (CVOCs) and EPA Method 6010 (chromium) with Quantitation Limits that are below the cleanup criteria listed on **Table 1**. Quality control samples include trip blanks (one per cooler), blind duplicates (one per 10 field samples), rinse/equipment blanks (one per 10 field samples) as well as laboratory method blanks and surrogate recovery samples. **Appendix D** contains the laboratory test results for groundwater sampling associated with this project.

5.0 Groundwater Monitoring Results and Trends

5.1 Source Area Monitoring Well Results

Success of the ERD program is measured from groundwater samples collected at the source area wells (MW-101 through MW-107) and the long-term monitoring wells located on the Warner property (LTMW-01, -02, -03, and -03A). Monitoring was conducted before and after the ERD injections. Analyses included natural attenuation background data (temperature, pH, conductivity, ORP, dissolved oxygen, iron, manganese, sulfate, and nitrate) as well as CVOCs. **Table 5** summarizes the results of groundwater sampling for the source area monitoring wells, and includes results collected from the pilot-scale injection test in wells MW-101 through MW-104. Results for other VOCs, which are listed as hazardous constituents in the AOC, but were not detected in laboratory samples are included in the laboratory data reports presented in **Appendix D**.

After the full scale ERD program, the source area monitoring wells were sampled monthly from May through December 2010. After this time, the wells were incorporated into quarterly sampling program. Concentration trends for TCE; cis-1,2-DCE; and oxidation reduction potential (ORP) are depicted on **Figures 9** through **15**.

All of the source area wells showed a decrease in the redox state of the groundwater after the ERD injections, although the results from wells MW-101 through MW-104 show a reduced state remained following the pilot-scale injections performed in 2008. At the newly installed wells (MW-105, -106, and -107) decreases in ORP levels of 100 to 400 millivolts (mVolts) reflected a strong shift to a reduced state in the aquifer, an environment that is much more conducive to reductive dechlorination. This is also reflected in the dissolved oxygen (DO) concentrations. **Table 5** shows that the DO levels typically fell by 1 to 7 mg/L following the ERD injections.

Table 5 and **Figures 9** through **15** also show a decrease in CVOC concentrations with little or no rebound until March of 2013 when a rise in both cis-12-dce and TCE were noted in wells MW-103 and MW-104. In response to this, Dana undertook the Supplemental ERD injection program outlined Section 2.3 of this report. Following this injection effort CVOC concentrations returned to levels well below the intermediate cleanup criteria. The lack of cis-1,2-DCE rebound suggests that abiotic degradation, in addition to reductive dechlorination, is contributing to the decrease in concentrations. With distance downgradient from the injection zone, the reduced CVOC concentrations are somewhat less dramatic, but continue to show lower concentrations than they were prior to the injections. Most important, all wells show TCE concentrations below the 100 µg/L intermediate cleanup for the source area. With TCE concentrations below 100 µg/L, MNA can be used to show that the long-term cleanup criteria can be met.

5.2 Long-term Monitoring Well Results

Initial background sampling of the long-term monitoring wells was conducted in March 2010. Since that time these wells have been sampled on a quarterly basis. Results from these sampling events for wells located on the Warner Property (LTMW-01, -02, -03, and -03A) are summarized on **Table 6**, and the concentration trends for TCE; cis-1,2-DCE; and ORP are depicted on **Figures 16** through **19**.

MNA results for on-site wells LTMW-01,-02, and -03 reflect the effects of the full-scale ERD injections, albeit not as strongly as in the source area monitoring wells. ORP and DO levels are variable, with occasional values reflecting influence from the ERD program. This condition is expected as these water table wells also reflect conditions associated with accreting recharge water onto the water table surface with distance from the source area. To strengthen the level of ERD at the LTMW-03 location, Dana elected to conduct a Supplemental ERD injection program upgradient of this well during the 2013 Supplemental ERD program. MNA results at the deep monitoring well LTMW-03A more strongly

reflected the effects of the ERD program. The following is a summary of the COVC results and trends in these long-term monitoring wells.

- Wells LTMW-01 and LTMW-02 meet the long-term cleanup criteria for all CVOCs.
- Concentrations at LTMW-03 (a shallow water table well) have responded well to the supplemental ERD program in August of 2013, which included an injection gallery upgradient of this area. During the first quarter sampling event in 2014, the TCE concentration (5.6 µg/L) was only slightly above the long term cleanup criteria of 5 µg/L.
- Well LTMW-03A (a deep monitoring well) meets the long-term cleanup criteria for TCE and cis-21,2-DCE. However, the vinyl chloride concentration (5.1 µg/L) is above the long term cleanup criteria (2 µg/L). The presence of vinyl chloride reflects reductive dechlorination, which is occurring in response to the supplemental ERD program performed upgradient of this location in 2013. As the aquifer returns to aerobic conditions, it is anticipated that vinyl chloride will undergo aerobic oxidation or cometabolism to decrease concentrations below the long term cleanup criteria within the next two monitoring events.

Sampling of the off-site long-term monitoring wells at Hononegah road (LTMW-04, -05, -06, and -07) enables evaluation of water quality trends upgradient of the residential area in Hononegah Estates. **Table 7** presents tabulated results from these wells, while **Figure 20** through **Figure 24** illustrate concentration trends for TCE; cis-1,2-DCE; and ORP. The following is a summary of the COVC results and trends in these long-term monitoring wells:

- The wells along Hononegah Road continue to show stable conditions. **Figure 20** depicts the long term TCE concentration trend at this location, using both the original well, N1-60, which had to be abandoned in 2005, as well as the new long term monitoring wells installed in 2009 (LTMW-04 through -07). **Figure 20** illustrates a dramatic reduction in TCE concentration over time. In the late 1980s TCE concentrations ranged from 1,000 to 1,400 µg/L (these high concentrations are not shown on the figure in order to maintain a useful scale for depicting current concentrations). In the 1990s, TCE concentrations decreased to levels below 500 µg/L. From 2000 to 2005, TCE concentrations continued to fall to levels below 50 µg/L where they remain today. Given this long term stable condition, less frequent (semi-annual) monitoring of these wells is recommended. Less frequent monitoring is particularly applicable at this location since these wells are only used to judge long term concentration trends (as opposed to the source area or Edgemere Terrace, where monitoring results may be used to trigger more active remedial efforts).

- **Figure 21** and **Figure 24** show that TCE concentrations in wells LTMW-04 and LTMW-07 near the western and eastern boundary of the zone of affected groundwater, respectively, have low TCE concentrations (<10 µg/L). At LTMW-07, TCE fell below the 5 µg/L long-term cleanup criteria. This reflects the shrinking of the area of affected groundwater margins.

- **Figure 22** and **Figure 23** show TCE concentrations are stable, albeit somewhat higher in wells LTMW-05 and LTMW-06 (TCE concentrations approximately 11 and 28 µg/L), reflecting conditions near the center of the area of affected groundwater.

Sampling of the off-site long-term monitoring wells at Edgemere Terrace (LTMW-08, -09, -10, and -11) enables evaluation of water quality trends upgradient of the Rock River. **Table 8** presents tabulated results from these wells, while **Figures 25** through **28** illustrate concentration trends for TCE; cis-1,2-DCE; and ORP. The following is a summary of the COVC results and trends in these long-term monitoring wells:

- All four wells have TCE at concentrations below the intermediate cleanup criteria for groundwater to surface water discharge (25 µg/L). Based on the AAOC these conditions show that the groundwater remediation system should remain shut down.

- **Figure 25** and **Figure 28** show that concentrations in wells LTMW-08 and LTMW-11 (near the western and eastern boundary of the zone of affected groundwater, respectively) reflect minimal impact with TCE concentrations below the long-term cleanup criteria. As with wells LTMW-04 and LTMW-07 on Hononegah Road, this again reflects shrinking of the margins of the area of affected groundwater.

- **Figure 26** and **Figure 27** show that concentrations in wells LTMW-09 and LTMW-10, located near the center of the zone of affected groundwater, showed slightly higher TCE concentrations (approximately 5 and 7 µg/L). These concentrations are well below the intermediate groundwater to surface water discharge criteria.

Most important, the results shows stable to decreasing CVOC concentrations that meet the intermediate cleanup criteria for groundwater to surface water discharge. Based on this, the groundwater remediation system at Edgemere Terrace should remain suspended while long-term MNA is performed at these wells. It is expected that these wells will meet the long-term cleanup criteria with time. Dana anticipates submitting a request to decommission the groundwater remediation system after four additional quarters of groundwater sampling.

6.0 Conclusion and Recommendations

This report documents remedial activities conducted in accordance with the 2009 Revised Work Plan to Administrative Order on Consent at the former Warner Electric Division facility in Roscoe, Illinois. Overall, the remedial activities resulted in a substantial reduction in the mass and concentration of remaining residual impacts at the Former Warner site to such a degree that the site is now ready to move into a long-term MNA program to show the final long term cleanup criteria can be met.

6.1 Conclusions

Three separate remedial activities have been performed at and downgradient of the facility as outlined below.

6.1.1 Groundwater Remediation by Enhanced Reductive Dechlorination

- A full scale ERD program was conducted in March 2010 in accordance with the 2009 Work Plan. The program included 300 injection points distributed across 5 separate injection galleries. A focused, supplemental ERD program was conducted in the source area in 2013 following a rise in TCE and cis-1,2-DCE concentrations at monitoring wells MW-103 and MW-104.
- At each injection point, approximately 115 gallons of ABC proprietary solution was injected at 6 separate intervals in the shallow aquifer.
- Groundwater sampling at source area monitoring wells has shown substantial reductions in CVOC concentrations. All wells meet the intermediate cleanup criteria and many meet the long term cleanup criteria.

6.1.2 Vadose Zone Remediation by Soil Vapor Extraction

- A full scale SVE system, consisting of 26 extraction points, a SVE blower, and a carbon absorption unit was installed at the Former Warner facility.
- The system operated from April 2010 through August 2011, during which time system influent and emission samples were collected and analyzed. The emission samples showed the system operated within permit limits. The influent samples showed the dramatic reductions in CVOC concentrations with very low and stable results at the conclusion of system operation.

6.1.3 Long-term Groundwater Monitoring

- A long-term monitoring well network has been installed in accordance with the 2009 Work Plan.
- Quarterly sampling has been conducted at the source area and long-term monitoring wells since 2010 (17 quarterly events).
- Results from the quarterly sampling show that all of the intermediate cleanup criteria specified in the 2009 Work Plan have been met and the site is now ready to transition to the long term MNA monitoring program presented in the 2009 Work Plan.

6.2 Recommendations

Based on the success of the remedial actions and associated groundwater monitoring, AECOM recommends that the facility now be placed in the long-term MNA program. Under this program, the groundwater remediation system on Edgemere Terrace and the soil vapor extraction system at the former Warner facility will remain shut down as sampling continues. Dana anticipates requesting permanent decommissioning of these systems following four additional quarterly sampling events. Given the extensive quarterly sampling that has been performed in the long-term monitoring well

network, AECOM further recommends that the monitoring wells along Hononegah Road (LTMW-04 through LTMW-07 be placed on a semi-annual sampling program (twice per year). As the project moves forward and continued monitoring demonstrates the stability of CVOC concentrations within the area of affected groundwater, we anticipate requesting additional portions of the monitoring network transition to less frequent monitoring.

7.0 References

AECOM, 2013. 2013 Third Quarter Progress Report, Former Warner Clutch and Break Facility, Roscoe, Illinois, dated October 15, 2013.

RMT. 2009a. Revised Work Plan to amend administrative order on consent. Warner Electric Brake and Clutch Division, Roscoe, Illinois. April 2009.

RMT, 2009b. Work Plan for Installation and Sampling of New Monitoring Well Network and Shut Down of Existing Groundwater Remediation System, Former Warner Electric Facility, Roscoe, Illinois, December 2009

RMT. 2008a. Groundwater Screening Results, Former Warner Electric, Roscoe, Illinois. September 2008

RMT. 2008b. Sub Slab Vapor and Indoor Air Test Results, Former Warner Electric, Roscoe, Illinois. September 2008.

RMT. 2007. Work Plan to amend administrative order on consent. Warner Electric Brake and Clutch Division, Roscoe, Illinois. October 2007.

RMT. 2006a. Passive Soil Gas Survey at the Warner Electric Brake and Clutch Division Property, Roscoe, Illinois. August 2006.

RMT. 2006b. On-site Soil and Groundwater Investigation Results, Former Warner Electric Brake and Clutch Division, Roscoe, Illinois. August 2006.

Tables

Table 1
Hazardous Constituents and Cleanup Criteria
Former Warner Facility
Roscoe, Illinois

HAZARDOUS CONSTITUENT	LONG TERM CLEANUP CRITERIA (µg/L)	INTERMEDIATE CLEANUP CRITERIA FOR SOURCE AREA GROUNDWATER (µg/L)	INTERMEDIATE CLEANUP CRITERIA FOR NONPOTABLE GROUNDWATER EXPOSURE (µg/L)	INTERMEDIATE CLEANUP CRITERIA FOR GROUNDWATER DISCHARGE TO ROCK RIVER (µg/L)	Indoor Air Cleanup Criteria[6] ppb(v)
Trichloroethylene	5[1]	100[6]	1,900[6]	25[7]	20.4
1,1,1,-Trichloroethane	200[1]	NA	NA	76[8]	7300
Vinyl chloride	2[1]	NA	NA	120[7]	9.29
Methylene chloride	5[1]	NA	NA	340[7]	87
Tetrachloroethylene	5[1]	NA	NA	45[8]	6.93
cis-1,2-Dichloroethylene	70[1]	NA	6,100[6]	620[3]	NA
Dichlorodifluoromethane	7000[4]	NA	NA	1960[10]	292
trans-1,2-Dichloroethylene	100[1]	NA	NA	970[8]	87.6
1,1-Dichloroethane	200[5]	NA	NA	47[8]	25.6
1,4-Dichlorobenzene	75[1]	NA	NA	9.4[8]	3.72
Toluene	1,000[1]	NA	NA	253[8]	7300
Chromium	100[1]	NA	NA	42[8]	NA

Notes: (1) Maximum Concentration Level (MCL) promulgated under the Safe Drinking Water Act.

(2) Proposed MCL for the USEPA.

(3) Indiana Department of Environmental Management chronic aquatic life, USEPA. *Great Lakes Initiative Clearing House*. Accessed 12/18/07

(4) Health-based limit for systemic toxicant established by the USEPA.

(5) No limit or criterion established by the USEPA; limit indicated shall be used for this Consent Order.

(6) Limit established in 2009 Workplan

(7) Illinois Water Quality Criteria, Human Nonthreshold Criterion (Illinois Pollution Control Board (IPCB) regulations at 35 IAC 302.210, Nov. 11, 2008.

(8) USEPA Region 5 Ecological Screening Level

(9) Illinois Water Quality Criteria, Human Nonthreshold Criterion (Illinois Pollution Control Board (IPCB) regulations at 35 IAC 302.210, Nov. 11, 2008.

(10) Region 6 Chronic Aquatic Life. Oak Ridge National Laboratory. *RAIS Ecological Benchmark Tool*. Accessed 12/4/07.

(?) What's going on here?

Table 2
SVE Emission Summary
Former Warner Facility
Roscoe, Illinois

Permit Req.	Date	Time	Flow Rate (cmf)	Analyte Concentration (ppbv)								Emissions (lb/hr)[1]								Total Emmisions[2]		
				TCE	cis-DCE	trans-DCE	Vinyl Chloride	TCA	1,1-DCE	1,1-DCA	Toluene	TCE	cis-DCE	trans-DCE	Vinyl Chloride	TCA	1,1-DCE	1,1-DCA	Toluene			
				20.4		87.6	9.29					132	97	97	63	134	97	99	92	(lb/hr)	(ton/mo)	(ton/yr)
																			Permit Critera	8.0	0.1	1.0
	4/15/2010	Test	1000	207	764	0	50	0	--	0	0	0.0042	0.0115	0	0.0005	0.0000	0	0	0	0.0162	0.0058	0.0700
Daily (3 Days)	5/24/2010	3:45	1000	190	620	3.6	39	7.3	--	4.4	0	0.0039	0.0093	0.0001	0.0004	0.0002	0	0.0001	0	0.0139	0.0050	0.0599
	5/24/2010	DUP	1000	200	590	3.4	38	7.0	--	4.2	0	0.0041	0.0089	0.0001	0.0004	0.0001	0	0.0001	0	0.0136	0.0049	0.0587
	5/25/2010	2:05	1000	12	59	0	18	0	--	0	1.5	0.0002	0.0009	0	0.0002	0	0	0.0000	0.0000	0.0013	0.0005	0.0057
	5/26/2010	3:15	1000	9.5	53	0	32	0	--	0	1.4	0.0002	0.0008	0	0.0003	0	0	0.0000	0.0000	0.0013	0.0005	0.0056
Twice a week (2 Weeks)	5/28/2010	1:30	1000	3.7	300	4.3	7.7	2.5	40	16	0	0.0001	0.0045	0.0001	0.0001	0.0001	0.0006	0.0002	0	0.0056	0.0020	0.0243
	6/2/2010	1:30	1000	240	2600	14	0	20	23	93	0	0.0049	0.0391	0.0002	0	0.0004	0.0003	0.0014	0	0.0464	0.0167	0.2005
	6/7/2010	1:30	1000	15	910	4.1	0	12	7.9	34	0	0.0003	0.0137	0.0001	0	0.0002	0.0001	0.0005	0	0.0149	0.0054	0.0646
	6/10/2010	1:30	1000	18	740	3.1	0	15	4.5	19	0	0.0004	0.0111	0.0000	0	0.0003	0.0001	0.0003	0	0.0122	0.0044	0.0528
Every other Month	8/5/2010	11:15	1000	342	94.4	0	0	32.8	0	0	0	0.0070	0.0014	0.0000	0	0.0007	0.0000	0.0000	0	0.0091	0.0033	0.0393
	12/15/2010	9:47	1000	6460	1850	0	0	1060	0	0	0	0.1322	0.02782	0	0	0.02202	0	0	0	0.1820	0.0655	0.7864
	2/16/2011	15:00	1000	4690	0	0	0	0	0	0	0	0.09598	0	0	0	0	0	0	0	0.0960	0.0346	0.4146
	3/15/2011	15:15	1000	469	115	0	0	45.1	0	0	0	0.0096	0.00173	0	0	0.00094	0	0	0	0.0123	0.0044	0.0530
	5/17/2011	17:17	1000	300	31.3	0	0	0		0	43.5	0.00614	0.00047	0	0	0	0	0	0.00062	0.0066	0.0024	0.0286

Notes

(1) The numerical values in the heading under Emissions are the molecular weight for each analyte

(2) Monthly and yearly emissions shown are based on the hourly rate calculated for each sampling event, and assume SVE blower operates 24/7.

Table 3
SVE Influent Concentration Results
Former Warner Facilitiy
Roscoe, Illinois

Group	Date	Analyte Concentration (ppbv)											
		PCE	TCE	cis-DCE	trans-DCE	Vinyl Chloride	TCA	1,1-DCE	1,2 DCA	1,1-DCA	Toluene	Methylene Chloride	TOTAL VOC Concentration
1	6/10/2010	9.0	693.4	322.3	--	--	290.0	--	--	15.9	--	41.4	**1,372**
	12/14/2010	--	2230	734	--	32	187	--	--	--	--	42	**3,225**
	2/16/2011	--	303	--	--	--	97	--	--	--	23	31	**454**
	5/17/2011	--	46	15	--	4	42	--	--	--	5	66	**178**
	6/10/2011	--	--	--	--	--	--	--	--	--	--	27	**27**
	9/19/2011	--	--	--	--	1	3	--	--	--	1	--	**6**
2	4/15/2010	--	921000	265000	--	--	3310	--	--	3210	--	6610	**1,199,130**
	6/2/2010	--	10,480	1,120	--	--	194	11	18	24	--	163	**12,010**
	9/20/2010	--	2,461	2,145	100	62	57	140	--	25	--	52	**5,042**
	12/14/2010	--	8270	5230	--	63.5	402	54.9	32.8	41	--	193	**14,287**
	2/16/2011	--	--	--	--	--	--	--	--	--	--	--	**0**
	3/15/2011	--	378	103	--	--	30.8	--	--	--	--	--	**512**
	6/10/2011	--	--	--	--	--	--	--	--	--	--	77.6	**78**
	7/1/2011	--	4.3	14	--	--	5.2	--	--	--	--	11.8	**35**
	9/19/2011	--	3	22	--	2.8	11.4	1.5	--	--	--	1.6	**42**
3	6/7/2010		1500	728	--	--	108	--	--	20.7	--	78	**2,435**
	12/14/2010		1960	867	--	--	--	--	--	--	--		**2,827**
	2/16/2011		--	--	--	--	--	--	--	--	--		**0**
	3/15/2011		80.4	--	--	--	--	--	--	--	--		**80**
	5/17/2011		144	48.7	--	--	22.1	--	--	--	--	20.3	**235**
	7/1/2011		18.8	17.4	--	--	6.6	--	--	--	2.5	38.6	**84**
	9/19/2011		83.4	70.5	--	--	6.6	1.4	--	--	--	2.1	**164**

Notes: 1. ppbv indicates parts per billion by volume.
2. 6/10/2010 results for Group 1 result based on averaging of discrete samples from extraction points SVE-1, -2, -3, -4, -6, -7, -10, and -13
3. 9/20/2010 result for Group 2 based on averaging of discrete samples from extraction points SVE-5, -8, -9, -15S, -15I, -15D, -16S, and -16D
4. 6/2/2010 result for Group 2 based on averaging of discrete samples from extraction points SVE-15I, and -16D

Table 4
Source Area and Long Term Monitoring Well Construction Details
Former Warner Facility
Roscoe, Illinois

Well Location and Designation	Total Depth	Screen Depth (feet bgs)	Stick-up or Flush Mount	Coordinates (X, Y Meters)	Top of Casing Elevation, Ft MSL	Ground Surface Elevation, Ft MSL
Source Area Monitoring Wells						
MW-101	35	25 to 35	Flush	NA	753.88	754.2
MW-102	35	25 to 35	Flush	NA	753.72	754.2
MW-103	35	25 to 35	Flush	NA	753.68	754.3
MW-104	35	25 to 35	Flush	NA	753.70	754.2
MW-105	35	25 to 35	Flush	334376.43, 4700561.73	751.19	751.4
MW-106	35	25 to 35	Flush	334341.37, 4700586.19	753.20	754.0
MW-107	35	25 to 35	Flush	334302.20, 4700597.22	753.78	754.2
Long Term Monitoring Wells on Warner Property						
LTMW-01	37	32 to 37	Stick-up	334231.33, 4700493.61	752.78	750.3
LTMW-02	40	35 to 40	Stick-up	334273.08, 4700468.24	752.47	749.9
LTMW-03	35	25 to 35	Stick-up	334307.96, 4700423.98	752.19	750.1
LTMW-03A	45	40 to 45	Stick-up	334307.96, 4700423.98	752.52	750.0
Long Term Monitoring Wells At Hononegah Road						
LTMW-04	75	70 to 75	Flush	333823.76, 4699554.34	748.50	749.0
LTMW-05	85	80 to 85	Flush	333846.20, 4699534.69	749.35	749.7
LTMW-06	70	65 to 70	Flush	333869.91, 4699515.54	749.95	750.4
LTMW-07	75	70 to 75	Flush	333894.23, 4699497.17	750.07	750.4
Long Term Monitoring Wells At Edgemere Terrace						
LTMW-08	75	70 to 75	Stick-up	333638.25, 4698956.17	729.16	726.6
LTMW-09	55	50 to 55	Flush	333712.39, 4698926.31	729.31	729.6
LTMW-10	55	50 to 55	Flush	333749.25, 4698922.54	726.08	725.9
LTMW-11	85	80 to 85	Flush	333781.52, 4698920.96	732.27	732.4

Notes: 1. Coordinates are in NAD 83 UTM Zone 16N

2. All wells to be constructed of 2-inch ID Schedule 40 PVC with factory cut screens with 0.010-inch openings.

Table 5
Source Area Monitoring Wells - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Volatile Organic Compounds						
		Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells [1]												100			
MW-101	9/16/2008	25.59	728.29	14.0	6.65	840	311	2.0	<1.0	<1.0	<1.0	35.7	3	<1.0	<1.0
	9/26/2008	NM[2]	NM[2]	NM	NM	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA
	10/8/2008	26.04	727.84	14.6	6.24	2,280	-569	1.5	<1.0	1.4	<1.0	134	45.7	<1.0	<1.0
	11/6/2008	26.65	727.23	13.9	7.12	940	-130	1.0	<1.0	<1.0	<1.0	7.0	<1.0	<1.0	<1.0
	11/24/2008	27.00	726.88	13.3	7.71	825	-255	0.2	<1.0	<1.0	<1.0	12.9	3.2	<1.0	<1.0
	12/15/2008	27.25	726.63	12.9	7.82	788	-273	0.2	<1.0	<1.0	<1.0	6.4	1.3	<1.0	<1.0
	3/10/2010	27.55	726.33	13.7	7.40	724	-128	0.8	<1.0	<1.0	<1.0	16.6	6.4	<1.0	<1.0
	5/27/2010	26.96	726.92	15.0	7.22	1127	-152	1.6	5.6	<1.0	<1.0	40.8	8.1	<1.0	<1.0
	7/1/2010	27.12	726.76	14.7	7.10	740	-10	0.1	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0
	7/29/2010	26.95	726.93	17.9	7.83	817	-290	0.1	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0
	8/31/2010	26.55	727.33	16.5	7.69	787	-249	0.0	<1.0	<1.0	<1.0	2.9	<1.0	<1.0	<1.0
	9/24/2010	27.08	726.80	16.2	7.69	783	-256	0.1	<1.0	<1.0	<1.0	2.8	<1.0	<1.0	<1.0
	11/4/2010	27.79	726.09	14.3	7.54	711	-164	1.0	<1.0	<1.0	<1.0	2.8	<1.0	<1.0	<1.0
	11/29/2010	28.23	725.65	13.0	7.54	730	-147	0.7	<1.0	<1.0	<1.0	2.5	<1.0	<1.0	<1.0
	12/20/2010	28.48	725.40	13.9	7.43	712	-129	1.6	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0
	3/22/2011	28.13	725.75	14.2	7.43	716	-145	0.9	< 0.9	< 0.75	< 0.45	1.6	< 0.83	< 0.89	< 0.18
	7/7/2011	28.08	725.80	17.2	7.61	759	-148	0.8	< 0.9	< 0.75	< 0.45	1.7	< 0.83	< 0.89	< 0.18
	9/23/2011	28.79	725.09	28.8	7.44	712	-132	2.4	< 0.9	< 0.75	< 0.45	1.6	< 0.83	< 0.89	< 0.18
	12/21/2011	29.14	724.74	15.8	7.39	665	-120	3.1	< 0.9	< 0.75	< 0.45	1.5	< 0.83	< 0.89	< 0.18
	3/6/2012	29.5	724.38	15.2	7.47	692	-74	0.6	< 0.9	< 0.75	< 0.45	1.5	< 0.83	< 0.89	< 0.18
	6/7/2012	29.96	723.92	14.8	7.46	716	-125	2.0	< 0.9	< 0.75	< 0.45	1.6	< 0.83	< 0.89	< 0.18
	9/27/2012	32.63	721.25	14.9	7.35	788	-95	4.1	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	12/20/2012	32.22	721.66	14.9	7.33	795	-38	4.6	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	3/9/2013	31.64	722.24	14.4	7.35	726	-16	4.2	< 0.9	< 0.75	< 0.45	0.50 J	< 0.83	< 0.89	< 0.18
	5/20/2013	27.7	726.18	15.2	7.31	725	-54	3.5	< 0.44	< 0.28	< 0.47	4.6	< 0.42	< 0.37	< 0.18
	8/27/2013	26.7	727.18	17.2	7.39	741	-57	3.7	< 0.44	< 0.28	< 0.47	4.3	< 0.42	< 0.37	< 0.18
	12/11/2013	28.8	725.08	15.3	7.19	718	5	5.2	< 0.44	< 0.28	< 0.47	12.8	< 0.42	< 0.37	< 0.18
	3/11/2014	29.39	724.49	15.2	7.24	725	-74	4.0	0.58 J	0.49 J	< 0.47	22.6	0.90 J	< 0.37	< 0.18
MW-102	9/16/2008	25.40	728.32	14.0	6.49	854	331	2.0	1.8	<1.0	<1.0	80.7	14.9	<1.0	<1.0
	9/26/2008, S*[3]	NM	NM	15.6	6.96	855	270	8.8	2.3	1	<1.0	106[5]	17.1	<1.0	<1.0
	9/26/2008, D*[4]	NM	NM	15.2	6.97	855	263	7.9	2.6	1.2	<1.0	128	21.8	<1.0	<1.0
	10/8/2008	25.93	727.79	14.5	6.9	1012	-284	1.8	2.1	<1.0	<1.0	100	16.2	<1.0	<1.0
	11/6/2008	26.51	727.21	14.4	6.97	858	-205	0.5	1	<1.0	<1.0	75.4	11.5	<1.0	<1.0
	11/24/2008	26.85	726.87	13.1	7.07	837	-229	0.3	<1.0	<1.0	<1.0	43.7	11.7	<1.0	<1.0
	12/15/2008	27.25	726.47	12.5	7.15	725	-210	0.3	<1.0	<1.0	<1.0	23.3	7.0	<1.0	<1.0
	3/9/2010	27.40	726.32	13.8	7.21	754	-69	2.0	<1.0	<1.0	<1.0	22.2	5.5	<1.0	<1.0
	5/27/2010	26.80	726.92	15.5	7.12	808	-153	0.6	6	1.1	<1.0	86.9	13.4	<1.0	<1.0
	7/1/2010	26.99	726.73	15.1	6.88	710	-5	0.1	<1.0	<1.0	<1.0	8.4	1.1	<1.0	<1.0
	7/29/2010	26.76	726.96	18.4	7.33	720	-196	0.4	<1.0	<1.0	<1.0	9.9	1.1	<1.0	<1.0
	8/30/2010	26.45	727.27	18.5	7.13	752	-131	0.6	<1.0	<1.0	<1.0	11.9	<1.0	<1.0	<1.0
	9/24/2010	27.08	726.64	16.0	7.27	714	-221	0.7	<1.0	<1.0	<1.0	5.9	<1.0	<1.0	<1.0
DUP-02	9/24/2010	27.08	726.64	16.0	7.27	714	-221	0.7	<1.0	<1.0	<1.0	5.8	<1.0	<1.0	<1.0
	11/4/2010	27.63	726.09	14.4	7.53	625	-140	0.6	<1.0	<1.0	<1.0	3.1	<1.0	<1.0	<1.0
	11/29/2010	28.04	725.68	12.9	7.45	644	-124	0.8	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	<1.0
	12/20/2010	28.32	725.40	13.9	7.38	622	-80	1.9	<1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0
	3/22/2011	27.99	725.73	14.1	7.30	667	-95	1.7	< 0.9	< 0.75	< 0.45	2.2	< 0.83	< 0.89	< 0.18

Table 5
Source Area Monitoring Wells - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Volatile Organic Compounds						
		Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells [1]												100			
MW-102 continued	7/7/2011	27.90	725.82	17.6	7.42	750	-51	1.8	< 0.9	< 0.75	< 0.45	2.1	< 0.83	< 0.89	< 0.18
	9/23/2011	28.68	725.04	15.7	7.32	703	-42	2.8	< 0.9	< 0.75	< 0.45	2.3	< 0.83	< 0.89	< 0.18
	12/21/2011	29	724.72	15.8	7.36	642	-75	2.1	< 0.9	< 0.75	< 0.45	3.5	< 0.83	< 0.89	< 0.18
	3/6/2012	29.5	724.22	15.1	7.50	655	-55	0.4	< 0.9	< 0.75	< 0.45	4.1	< 0.83	< 0.89	< 0.18
	6/7/2012	29.84	723.88	14.5	7.38	665	-50	0.6	< 0.9	< 0.75	< 0.45	3.2	< 0.83	< 0.89	< 0.18
	9/27/2012	31.50	722.22	14.7	7.53	691	-120	0.4	< 0.9	< 0.75	< 0.45	0.8 J	< 0.83	< 0.89	< 0.18
DUP-02	9/27/2012	31.50	722.22	14.7	7.53	691	-120	0.4	< 0.9	< 0.75	< 0.45	0.76 J	< 0.83	< 0.89	< 0.18
	12/20/2012	32.05	721.67	14.9	7.43	736	-81	1.1	< 0.9	< 0.75	< 0.45	0.67 J	< 0.83	< 0.89	< 0.18
DUP-02	12/20/2012	32.05	721.67	14.9	7.43	736	-81	1.1	< 0.9	< 0.75	< 0.45	0.64 J	< 0.83	< 0.89	< 0.18
	3/9/2013	31.49	722.23	14.6	7.34	710	-29	2.3	< 0.9	< 0.75	< 0.45	6	< 0.83	< 0.89	< 0.18
DUP-02	3/9/2013	31.49	722.23	14.6	7.34	710	-29	2.3	< 0.9	< 0.75	< 0.45	6.1	< 0.83	< 0.89	< 0.18
	5/20/2013	27.58	726.14	15.1	7.33	692	-41	1.0	< 0.44	< 0.28	< 0.47	6.5	0.65 J	< 0.37	< 0.18
DUP-02	5/20/2013	27.58	726.14	15.1	7.33	692	-41	1.0	< 0.44	< 0.28	< 0.47	8.1	0.69 J	< 0.37	< 0.18
	8/27/2013	26.55	727.17	16.2	7.23	721	-117	2.2	< 0.44	< 0.28	< 0.47	13.9	0.60 J	< 0.37	< 0.18
DUP-02	8/27/2013	26.55	727.17	16.2	7.23	721	-117	2.2	< 0.44	< 0.28	< 0.47	13.5	0.71 J	< 0.37	< 0.18
	12/11/2013	28.61	725.11	15.6	7.23	688	-6	1.7	< 0.44	< 0.28	< 0.47	6.9	2	< 0.37	< 0.18
	3/12/2014	29.23	724.49	13.3	7.26	701	-87	1.5	< 0.44	0.35 J	< 0.47	25.7	4.1	< 0.37	< 0.18
DUP-02	3/12/2014	29.23	724.49	13.3	7.26	701	-87	1.5	< 0.44	0.38 J	< 0.47	26.9	4.3	< 0.37	< 0.18
MW-103	9/16/2008	25.4	728.28	14.3	6.65	864	344	2..0	1.3	<1.0	<1.0	132	23.1	<1.0	<1.0
	9/26/2008	NM	NM	14.2	6.93	867	243	8.7	<5.0	<5.0	<5.0	230	39.9	<5.0	<5.0
	10/8/2008	25.96	727.72	14.1	6.88	984	-93	3.9	1.3	<1.0	<1.0	149	23.3	<1.0	<1.0
	11/6/2008	26.57	727.11	14.4	6.89	906	-200	1.2	1.1	<1.0	<1.0	120	19.7	<1.0	<1.0
	11/24/2008	26.86	726.82	13.4	6.88	948	-244	0.3	<1.0	<1.0	<1.0	78.2	23.3	<1.0	<1.0
	12/15/2008	27.27	726.41	13.5	7.14	774	-223	0.2	<1.0	<1.0	<1.0	62.0	44.8	<1.0	<1.0
	3/9/2010	27.40	726.28	13.8	7.19	729	-59	0.7	<1.0	<1.0	<1.0	40.6	10.7	<1.0	<1.0
	5/27/2010	26.82	726.86	15.8	7.01	837	-175	0.3	<1.0	<1.0	<1.0	1.9	51.1	<1.0	<1.0
	7/1/2010	27.03	726.65	15.0	6.85	763	-6	0.1	<1.0	<1.0	<1.0	3.2	28.6	<1.0	<1.0
	7/29/2010	26.90	726.78	18.8	7.29	759	-222	0.4	<1.0	<1.0	<1.0	11.3	14.5	<1.0	<1.0
	8/30/2010	26.41	727.27	18.2	7.18	726	-175	0.2	<1.0	<1.0	<1.0	11.3	6.4	<1.0	<1.0
	9/24/2010	26.90	726.78	16.6	7.28	721	-270	0.2	<1.0	<1.0	<1.0	13.0	3.9	<1.0	<1.0
	11/4/2010	27.62	726.06	14.6	7.43	665	-141	0.4	<1.0	<1.0	<1.0	10.0	1.8	<1.0	<1.0
	11/29/2010	28.10	725.58	12.9	7.39	675	-125	0.4	<1.0	<1.0	<1.0	12.4	1	<1.0	<1.0
	12/20/2010	28.30	725.38	14.0	7.35	645	-110	1.6	<1.0	<1.0	<1.0	6.2	<1.0	<1.0	<1.0
DUP-01	12/20/2010	28.30	725.38	14.0	7.35	645	-110	1.6	<1.0	<1.0	<1.0	5.7	<1.0	<1.0	<1.0
	3/22/2011	27.95	725.73	14.2	7.33	723	-128	0.1	< 0.9	< 0.75	< 0.45	3.1	< 0.83	< 0.89	< 0.18
	7/7/2011	27.84	725.84	17.7	7.35	762	-74	0.5	< 0.9	< 0.75	< 0.45	6.6	< 0.83	< 0.89	< 0.18
	9/23/2011	28.63	725.05	15.6	7.32	719	-99	1.4	< 0.9	< 0.75	< 0.45	2.3	< 0.83	< 0.89	< 0.18
	12/21/2011	28.98	724.70	15.6	7.25	654	-101	2.1	< 0.9	< 0.75	< 0.45	1.9	< 0.83	< 0.89	< 0.18
	3/6/2012	29.52	724.16	15.2	7.36	699	-92	0.4	< 0.9	< 0.75	< 0.45	2.0	< 0.83	< 0.89	< 0.18
DUP-02	3/6/2012	29.52	724.16	15.2	7.36	699	-92	0.4	< 0.9	< 0.75	< 0.45	2.2	< 0.83	< 0.89	< 0.18
	6/7/2012	29.81	723.87	15.3	7.22	707	-39	0.3	< 0.9	< 0.75	< 0.45	2.0	< 0.83	< 0.89	< 0.18
	9/27/2012	31.50	722.18	14.8	7.30	736	-70	0.0	< 0.9	< 0.75	< 0.45	1.2	< 0.83	< 0.89	< 0.18
	12/20/2012	32.06	721.62	14.9	7.30	749	38	0.1	< 0.9	< 0.75	< 0.45	1.7	< 0.83	< 0.89	< 0.18
	3/9/2013	31.47	722.21	14.7	7.24	719	69	0.7	< 0.9	< 0.75	< 0.45	82.9	10	< 0.89	< 0.18
	5/20/2013	27.54	726.14	15.2	7.23	727	42	4.6	< 2.2	< 1.4	< 2.4	355	35.7	< 1.9	< 0.92
	8/27/2013	26.56	727.12	16.6	6.45	1645	-22	1.0	0.71	0.30 J	< 0.47	109	23.5	< 0.37	< 0.18
	10/23/2013	27.97	725.71	15.5	7.02	873	-163	0.1	<0.44	<0.28	< 0.47	7.3	25.2	< 0.37	< 0.18
	11/25/2013	28.38	725.30	15.6	7.23	736	-131	0.1	<0.44	<0.28	< 0.47	6.5	6.8	< 0.37	< 0.18
	12/11/2013	28.65	725.03	15.5	7.27	687	-119	0.1	<0.44	<0.28	< 0.47	9.5	5.6	< 0.37	< 0.18
	3/11/2014	29.24	724.44	15.5	7.40	677	-115	0.6	<0.44	<0.28	< 0.47	9.6	4.2	< 0.37	< 0.18

Table 5
Source Area Monitoring Wells - Data Summary
Former Warner Facility
Roscoe, Illinois

		Field Parameters							Volatile Organic Compounds						
Well	Date	Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH Std. Units	Spec. Cond. µmhos/cm	ORP mV	Dis. Oxygen mg/L	1,1,1-TCA µg/L	1,1-DCA µg/L	PCE µg/L	TCE µg/L	cis-1,2-DCE µg/L	trans-1,2-DCE µg/L	Vinyl Chloride µg/L
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells [1]												100			
MW-104	9/16/2008	25.47	728.23	14.3	6.79	842	337	2	1.4	1	<1.0	172	27.4	<1.0	<1.0
	9/26/2008 (S*)	NM	NM	14.8	6.87	868	166	8.4	<5.0	<5.0	<5.0	356	59.3	<5.0	<5.0
	9/26/2008 (D*)	NM	NM	14.5	6.80	858	176	7.8	<5.0	<5.0	<5.0	256	41.2	<5.0	<5.0
	10/8/2008	26.01	727.69	14.1	7.13	849	226	8.3	<2.0	<2.0	<2.0	157	21.7	<2.0	<2.0
	11/6/2008	26.62	727.08	14.6	6.82	954	-127	3.2	<2.5	<2.5	<2.5	150	51.4	<2.5	<2.5
	11/24/2008	26.95	726.75	12.0	6.64	893	-158	0.9	1.8	<1.0	<1.0	126.0	51	<1.0	<1.0
	12/15/2008	27.34	726.36	12.6	7.03	759	-201	0.5	1.5	<1.0	<1.0	109.0	34.9	<1.0	<1.0
	3/9/2010	27.49	726.21	13.9	7.13	751	-23	0.5	<1.0	<1.0	<1.0	61.1	20.9	<1.0	<1.0
	5/27/2010	26.91	726.79	15.0	7.00	843	-180	0.2	5.5	<1.0	<1.0	15.7	112	<1.0	<1.0
	7/1/2010	27.1	726.60	15.2	6.83	760	-6	0.1	<1.0	<1.0	<1.0	2.8	68.3	<1.0	<1.0
	7/29/2010	26.88	726.82	18.3	7.19	787	-212	0.5	<1.0	<1.0	<1.0	8.3	31.2	<1.0	<1.0
DUP-01	7/29/2010	26.88	726.82	18.3	7.19	787	-212	0.5	<1.0	<1.0	<1.0	7.6	32.2	<1.0	<1.0
	8/30/2010	26.55	727.15	18.8	7.06	785	-163	0.2	<1.0	<1.0	<1.0	9.4	12.4	<1.0	<1.0
	9/24/2010	26.94	726.76	16.6	7.24	758	-253	0.3	<1.0	<1.0	<1.0	11.4	5.8	<1.0	<1.0
	11/4/2010	27.67	726.03	14.8	7.33	698	-129	0.2	<1.0	<1.0	<1.0	14.6	3.3	<1.0	<1.0
	11/29/2010	28.15	725.55	13.2	7.31	719	-119	0.6	<1.0	<1.0	<1.0	14.0	2.0	<1.0	<1.0
	12/20/2010	28.34	725.36	14.3	7.23	703	-83	2.7	<1.0	<1.0	<1.0	15.0	3.0	<1.0	<1.0
	3/22/2011	28.08	725.62	14.3	7.29	677	-122	0.2	< 0.9	< 0.75	< 0.45	1.4	< 0.83	< 0.89	< 0.18
DUP-02	3/22/2011	28.08	725.62	14.3	7.29	677	-122	0.2	< 0.9	< 0.75	< 0.45	1.3	< 0.83	< 0.89	< 0.18
	7/7/2011	27.94	725.76	18.1	7.30	780	-54	0.7	< 0.9	< 0.75	< 0.45	11.7	< 0.83	< 0.89	< 0.18
	9/23/2011	28.7	725.00	16.3	7.23	725	-70	1.8	< 0.9	< 0.75	< 0.45	8.8	< 0.83	< 0.89	< 0.18
	12/21/2011	29.06	724.64	15.9	7.09	722	-55	2.2	< 0.9	< 0.75	< 0.45	3.8	< 0.83	< 0.89	< 0.18
	3/6/2012	29.59	724.11	14.9	7.28	734	-56	0.3	< 0.9	< 0.75	< 0.45	2.0	< 0.83	< 0.89	< 0.18
	6/7/2012	29.88	723.82	16.0	7.23	705	-7	0.5	< 0.9	< 0.75	< 0.45	2.4	< 0.83	< 0.89	< 0.18
	9/27/2012	31.59	722.11	14.8	7.27	719	-75	0.0	< 0.9	< 0.75	< 0.45	0.93 J	< 0.83	< 0.89	< 0.18
	12/20/2012	32.12	721.58	14.9	7.28	734	-50	0.0	< 0.9	< 0.75	< 0.45	0.80 J	< 0.83	< 0.89	< 0.18
	3/9/2013	31.53	722.17	14.7	7.26	719	4	0.4	< 0.9	< 0.75	< 0.45	5.3	< 0.83	< 0.89	< 0.18
	5/20/2013	27.61	726.09	15.1	7.18	719	23	3.5	< 0.44	0.58 J	< 0.47	218	38	< 0.37	< 0.18
	8/27/2013	26.67	727.03	17.2	7.19	740	76	4.6	0.59 J	< 0.28	< 0.47	143	7.8	< 0.37	< 0.18
	10/23/2013	28.03	725.67	15.2	6.88	1030	-103	0.3	< 0.44	< 0.28	< 0.47	<0.36	13.8	< 0.37	< 0.18
	11/25/2013	28.41	725.29	15.8	7.05	754	-128	0.1	< 0.44	0.418 J	< 0.47	2	65.4	< 0.37	< 0.18
	12/11/2013	28.74	724.96	15.7	7.09	706	-112	0.2	< 0.44	0.35 J	< 0.47	2.4	49.3	< 0.37	< 0.18
	3/11/2014	29.31	724.39	15.1	7.28	728	-119	0.2	< 0.44	< 0.28	< 0.47	9.6	10.3	< 0.37	< 0.18
MW-105	3/10/2010	25.33	725.86	13.1	7.06	780	-61	NM	<1.0	1.8	<1.0	91.5	42.8	<1.0	2.6
	5/28/2010	25.03	726.16	16.0	7.26	3040	-480	0.30	<1.0	<1.0	<1.0	1.6	5.9	<1.0	<1.0
	7/1/2010	24.89	726.30	13.3	6.87	2050	-24	0.10	<1.0	<1.0	<1.0	2.7	37.9	<1.0	<1.0
DUP-01	7/1/2010	24.89	726.30	13.3	6.87	2050	-24	0.10	<1.0	<1.0	<1.0	2.5	37.5	<1.0	<1.0
	7/29/2010	24.68	726.51	14.7	7.34	1781	-266	0.13	<1.0	1.5	<1.0	<1.0	67.2	<1.0	<1.0
	8/30/2010	24.25	726.94	17.1	7.67	1158	-350	0.00	<1.0	1	<1.0	<1.0	27.7	<1.0	10.4
	9/24/2010	24.95	726.24	15.0	7.74	877	-319	0.12	<1.0	<1.0	<1.0	<1.0	6.6	<1.0	22.9
	11/4/2010	25.54	725.65	14.7	8.63	609	-364	0.03	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	41.4
DUP-01	11/4/2010	25.54	725.65	14.7	8.63	609	-364	0.03	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	34.4
	11/29/2010	26	725.19	14.1	9.05	583	-361	0.04	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	19.9
DUP-01	11/29/2010	26	725.19	14.1	9.05	583	-361	0.04	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	19.0
	12/21/2010	26.25	724.94	13.9	9.05	604	-26	0.98	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	18.6
	3/17/2011	25.97	725.22	14.2	8.84	677	-310	0.03	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	11.7
	7/6/2011	25.77	725.42	13.9	9.08	591	-293	0.27	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	7.3
	9/26/2011	26.56	724.63	14.1	8.98	646	-229	1.51	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	12/21/2011	26.89	724.30	14.2	8.83	585	-183	1.64	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	7
	3/6/2012	27.45	723.74	14.0	8.51	646	-235	0.05	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	6.9
	6/6/2012	27.7	723.49	14.3	8.24	665	-272	0.00	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	5.5
	9/27/2012	29.4	721.79	15.0	8.33	609	-308	-0.07	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	6.5
	12/21/2012	29.89	721.30	12.5	8.14	690	-275	0.04	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	5.2
	3/8/2013	29.33	721.86	12.0	8.17	720	-267	0.00	< 0.9	0.92	< 0.45	1.9	1.7	< 0.89	10.3
	5/20/2013	25.37	725.82	14.9	7.87	796	-250	0.04	< 0.44	0.79 J	< 0.47	3.4	8.5	< 0.37	4.5
	8/28/2013	24.52	726.67	15.6	7.84	597	-239	0.00	< 0.44	0.86 J	< 0.47	17.3	13.4	< 0.37	6.7
	12/11/2013	26.58	724.61	10.1	7.59	770	-158	0.08	< 0.44	0.98 J	< 0.47	51.2	26.2	< 0.37	19.1
	3/11/2014	27.14	724.05	11.5	8.10	616	-243	0.00	< 0.44	0.39 J	< 0.47	6.1	3.6	0.52 J	68.8

Table 5
Source Area Monitoring Wells - Data Summary
Former Warner Facility
Roscoe, Illinois

		Field Parameters							Volatile Organic Compounds						
Well	Date	Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells [1]												100			
MW-106	3/10/2010	27.42	725.78	13.1	7.16	752	176	7.0	<1.0	<1.0	<1.0	5.2	1.1	<1.0	<1.0
	5/28/2010	26.87	726.33	13.7	7.19	720	49	2.0	<1.0	<1.0	<1.0	5.3	2.2	<1.0	<1.0
	7/1/2010	27.02	726.18	13.8	6.52	616	-5	2.0	<1.0	<1.0	<1.0	3.6	<1.0	<1.0	<1.0
	7/29/2010	26.85	726.35	18.8	7.30	735	-175	0.3	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	<1.0
	8/25/2010	26.36	726.84	15.2	6.99	740	-94	1.1	<1.0	<1.0	<1.0	6.4	2.6	<1.0	<1.0
DUP-01	8/25/2010	26.36	726.84	15.2	6.99	740	-94	1.1	<1.0	<1.0	<1.0	6.4	2.7	<1.0	<1.0
	9/24/2010	26.95	726.25	15.1	7.15	773	-196	0.8	<1.0	<1.0	<1.0	6.7	2.9	<1.0	<1.0
	11/4/2010	27.64	725.56	14.5	7.26	739	-118	0.9	<1.0	<1.0	<1.0	5.1	15.7	<1.0	<1.0
	11/29/2010	28.10	725.10	13.9	7.26	766	-114	0.9	<1.0	<1.0	<1.0	1.4	3.8	<1.0	<1.0
	12/21/2010	28.34	724.86	12.9	7.22	751	-84	1.8	1.3	<1.0	2.1	2.6	4.2	1.5	<1.0
	3/17/2011	28.10	725.10	13.8	7.23	785	-90	0.5	< 0.9	< 0.75	< 0.45	1.2	< 0.83	< 0.89	< 0.18
	7/7/2011	27.94	725.26	14.3	7.19	778	-47	0.9	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	9/26/2011	28.68	724.52	13.9	7.08	761	-6	1.1	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	12/21/2011	28.99	724.21	13.1	7.07	752	-48	1.6	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	3/6/2012	29.53	723.67	13.9	7.26	786	-85	NM	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	6/6/2012	29.79	723.41	15.5	7.12	777	13	0.4	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	9/27/2012	31.49	721.71	15.3	7.12	744	2	0.1	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	12/20/2012	32.00	721.20	13.7	7.15	766	96	0.1	< 0.9	< 0.75	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18
	3/7/2013	31.42	721.78	10.8	7.15	9269	124	1.0	< 0.9	< 0.75	< 0.45	0.97 J	< 0.83	< 0.89	< 0.18
	5/20/2013	27.45	725.75	16.2	7.08	674	24	0.8	< 0.44	< 0.28	< 0.47	0.74 J	0.86 J	< 0.37	< 0.18
	8/28/2013	26.62	726.58	17.0	7.15	749	97	5.1	< 0.44	< 0.28	< 0.47	1.8	0.79 J	< 0.37	< 0.18
	12/11/2013	28.68	724.52	13.2	7.20	694	50	6.6	< 0.44	< 0.28	< 0.47	0.89 J	< 0.42	< 0.37	< 0.18
	3/11/2014	29.29	723.91	12.4	7.23	749	-75	7.4	< 0.44	< 0.28	< 0.47	0.42 J	< 0.42	< 0.37	< 0.18
MW-107	3/11/2010	27.7	726.08	14.1	7.05	794	139	5.0	16.4	<1.0	1.6	63.7	4.3	<1.0	<1.0
	5/27/2010	27.17	726.61	14.1	7.00	784	91	8.0	14.1	<1.0	1.4	53.0	3.2	<1.0	<1.0
	7/1/2010	27.35	726.43	14.5	6.70	723	0	7.7	14.9	<1.0	1.5	57.1	3.3	<1.0	<1.0
	7/29/2010	27.25	726.53	15.3	7.09	728	19	5.1	13.3	<1.0	1.6	53.3	2.9	<1.0	<1.0
	8/31/2010	26.78	727.00	16.6	7.00	726	10	4.7	11.1	<1.0	1.4	46.2	5.4	<1.0	<1.0
	9/24/2010	27.28	726.50	15.6	7.11	696	29	5.2	16.7	<1.0	1.7	51.4	8.0	<1.0	<1.0
	11/4/2010	27.97	725.81	15.0	7.13	743	48	6.8	10.7	<1.0	1.6	51.3	4.3	<1.0	<1.0
	11/29/2010	28.44	725.34	14.7	7.15	721	62	7.1	11.2	<1.0	1.6	48.2	4.1	<1.0	<1.0
	12/20/2010	28.67	725.11	14.8	7.12	688	16	5.1	13.4	1.5	1.1	48.8	4.3	<1.0	<1.0
	3/22/2011	28.35	725.43	14.3	7.14	668	81	4.9	9.9	1.5	1.3	36.9	26.7	< 0.89	< 0.18
	7/7/2011	28.25	725.53	15.3	7.25	656	10	5.0	12.5	< 0.75	< 0.45	20.7	12.0	< 0.89	< 0.18
	9/23/2011	28.98	724.80	14.9	7.17	668	14	4.7	8.1	< 0.75	1.1	17.9	16	< 0.89	< 0.18
	12/21/2011	29.32	724.46	15.3	7.16	646	-61	3.7	5.5	< 0.75	< 0.45	11.6	7.4	< 0.89	< 0.18
	3/6/2012	29.86	723.92	14.5	7.24	706	-126	NM	3.3	< 0.75	< 0.45	10.2	2.5	< 0.89	< 0.18
	6/7/2012	30.13	723.65	15.1	7.10	752	-41	1.0	7.6	< 0.75	< 0.45	8.5	3.7	< 0.89	< 0.18
	9/27/2012	31.81	721.97	15.4	7.13	707	26	0.4	3.4	< 0.75	0.94 J	5.9	2	< 0.89	< 0.18
	12/20/2012	32.34	721.44	15.3	7.14	739	86	0.2	3.5	< 0.75	1.1	4	2.3	< 0.89	< 0.18
	3/19/2013	31.74	722.04	15.0	6.98	777	93	0.6	21	0.97 J	1.1	6.3	6.8	< 0.89	< 0.18
	5/20/2013	27.83	725.95	15.4	7.05	799	18	0.7	12.2	0.61 J	0.65 J	4.9	3.1	< 0.37	< 0.18
	8/27/2013	26.95	726.83	17.1	6.58	863	99	3.9	28.9	0.75 J	0.86 J	12.5	5.3	< 0.37	< 0.18
DUP-03	8/27/2013	26.95	726.83	17.1	6.58	863	99	3.9	28.1	0.83 J	0.89J	12.3	5.0	< 0.37	< 0.18
	12/11/2013	29.02	724.76	16.1	7.12	667	25	4.0	8.1	< 0.28	0.89J	13.1	< 0.42	< 0.37	< 0.18
	3/12/2014	29.56	724.22	15.5	7.10	781	-69	4.4	5.4	< 0.28	0.89J	12.6	1.0 J	< 0.37	< 0.18

Notes (1) Limit established in 2009 Workplan
(2) NM indicates not measured
(3) S* indicates the samples was collected from the top of the water column in the well (less than 2 feet below the top of well screen).
(4) D* indicates the samples was collected from the bottom of the water column in the well (less than 2 feet below the bottom of the well screen).
(5) J indicates estimated concentration. Reported result is between the method detection limit and the practical quantitation limit.
(6) < indicates parameter was not detected above the listed method detection limit.
(7) **Red Bold** values exceed the Intermediate Cleanup Criteria

Table 6
Long Term Monitoring Wells on Warner Property - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Volatile Organic Compounds						
		Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Long Term Groundwater Clean-up Goal - All LTMW Wells [1]									*200*	*200*	*5*	*5*	*70*	*100*	*2*
LTMW-01	3/11/2010	27.51	725.27	11.9	7.06	803	135	2.0	19.5	8.7	<2.5	<2.5	*395*	2.8	<2.5
	6/27/2010	27.10	725.68	13.3	6.45	724	11	3.6	14.1	6.6	<4.0	< 4.0	*223*	<4.0	<4.0
	9/23/2010	27.10	725.68	15.1	7.04	717	44	2.0	22.1	7.4	<4.0	< 4.0	*199*	14.6	<4.0
	12/22/2010	28.53	724.25	12.2	7.15	712	40	1.8	19.7	9.1	<2.0	<2.0	*230*	3.4	<2.0
	3/16/2011	28.25	724.53	13.3	7.18	778	148	2.3	16.7	3.6	< 0.9	< 0.96	*119*	2.6	< 0.36
	7/6/2011	28.05	724.73	13.6	7.22	737	30	1.9	15.6	4.4	< 0.45	< 0.48	*115*	< 0.89	< 0.18
	9/22/2011	28.80	723.98	13.4	7.14	686	45	1.3	25.6	4.4	< 0.45	< 0.48	*98.4*	< 0.89	< 0.18
DUP-02	9/22/2011	28.80	723.98	13.4	7.14	686	45	1.3	25.1	4.3	< 0.45	< 0.48	*97.9*	< 0.89	< 0.18
	12/21/2011	29.20	723.58	11.2	7.12	692	-41	2.7	23.7	5.1	< 0.45	< 0.48	*89.2*	< 0.89	< 0.18
	3/1/2012	29.67	723.11	11.5	7.22	761	98	4.0	20.8	3.4	< 0.45	< 0.48	50.2	< 0.89	< 0.18
	6/7/2012	29.91	722.87	13.1	7.31	760	-50	1.0	18	2.4	< 0.45	< 0.48	23	< 0.89	< 0.18
	9/27/2012	31.62	721.16	12.7	7.17	718	6	1.9	22.9	3.2	< 0.45	0.72 J	23.9	< 0.89	< 0.18
	12/21/2012	32.09	720.69	12.4	7.12	725	90	3.3	15.1	2.6	< 0.45	< 0.48	13.8	< 0.89	< 0.18
	3/8/2013	31.47	721.31	11.2	7.22	707	175	3.6	10.2	2.1	< 0.45	< 0.48	18.2	< 0.89	< 0.18
	5/21/2013	27.52	725.26	13.8	7.18	706	131	3.6	10.4	1.2	< 0.47	< 0.43	5.1	< 0.37	< 0.18
	8/29/2013	26.84	725.94	16.0	7.19	715	96	3.6	7.2	0.92 J	< 0.47	< 0.43	4.1	< 0.37	< 0.18
	12/12/2013	28.87	723.91	10.7	7.16	671	126	4.0	3.4	0.42 J	< 0.47	< 0.36	2.9	< 0.37	< 0.18
	3/11/2014	29.44	723.34	10.8	7.21	737	-84	2.7	9.3	0.75 J	< 0.47	< 0.36	4.1	< 0.37	< 0.18
LTMW-02	3/11/2010	27.33	725.14	12.0	7.15	766	166	7.0	<1.0	<1.0	<1.0	*26.8*	7.3	<1.0	<1.0
	6/27/2010	26.83	725.64	13.9	6.71	672	25	10.7	<1.0	<1.0	<1.0	*16.1*	<1.0	<1.0	<1.0
	9/23/2010	26.83	725.64	14.7	7.21	734	99	6.1	<1.0	<1.0	<1.0	*10.1*	2.5	<1.0	<1.0
	12/22/2010	28.27	724.20	10.9	7.25	726	16	5.6	<1.0	<1.0	<1.0	*15.1*	3.3	<1.0	<1.0
	3/17/2011	27.97	724.50	13.0	7.29	756	158	3.7	< 0.9	< 0.75	< 0.45	*14.5*	3.5	< 0.89	< 0.18
	7/6/2011	27.80	724.67	15.1	7.27	752	39	3.0	< 0.9	< 0.75	< 0.45	*13.7*	3.8	< 0.89	< 0.18
	9/22/2011	28.54	723.93	13.0	7.21	710	53	3.9	< 0.9	< 0.75	< 0.45	*13.8*	2.2	< 0.89	< 0.18
	12/21/2011	28.95	723.52	11.6	7.25	689	-25	4.3	< 0.9	< 0.75	< 0.45	*10*	1.8	< 0.89	< 0.18
	3/1/2012	29.41	723.06	10.1	7.32	723	105	4.0	< 0.9	< 0.75	< 0.45	*9.3*	< 0.83	< 0.89	< 0.18
	6/6/2012	29.64	722.83	12.8	7.21	733	15	3.0	< 0.9	< 0.75	< 0.45	*10*	< 0.83	< 0.89	< 0.18
DUP-02	6/6/2012	29.64	722.83	12.8	7.21	733	15	3.0	< 0.9	< 0.75	< 0.45	*8.9*	< 0.83	< 0.89	< 0.18
	9/28/2012	31.37	721.10	12.0	7.19	700	183	4.1	< 0.90	< 0.75	< 0.45	*8.4*	< 0.83	< 0.89	< 0.18
	12/21/2012	31.81	720.66	11.8	7.19	697	126	5.3	< 0.90	< 0.75	< 0.45	*8.0*	< 0.83	< 0.89	< 0.18
	3/8/2013	31.20	721.27	11.3	7.25	694	200	6.2	< 0.90	< 0.75	< 0.45	*7.0*	< 0.83	< 0.89	< 0.18
	5/21/2013	27.23	725.24	13.1	7.24	717	180	7.6	< 0.44	< 0.28	< 0.47	3.8	< 0.42	< 0.37	< 0.18
	8/29/2013	26.60	725.87	13.5	7.18	699	228	5.1	< 0.44	< 0.28	< 0.47	3.0	< 0.42	< 0.37	< 0.18
	12/12/2013	28.61	723.86	9.3	7.21	691	117	4.8	< 0.44	< 0.28	< 0.47	3.0	< 0.42	< 0.37	< 0.18
	3/13/2014	29.04	723.43	10.0	7.12	806	64	7.0	< 0.44	< 0.28	< 0.47	2.7	< 0.42	< 0.37	< 0.18

Table 6
Long Term Monitoring Wells on Warner Property - Data Summary
Former Warner Facility
Roscoe, Illinois

		Field Parameters							Volatile Organic Compounds						
Well	Date	Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Long Term Groundwater Clean-up Goal - All LTMW Wells [1]									*200*	*200*	*5*	*5*	*70*	*100*	*2*
LTMW-03	3/11/2010	27.16	725.03	11.8	7.19	673	141	7.0	<1.0	<1.0	<1.0	*52.8*	57.3	<1.0	<1.0
	6/25/2010	26.79	725.40	13.6	8.85	769	15	7.0	<1.0	<1.0	<1.0	*107*	*76*	<1.0	<1.0
	9/21/2010	26.62	725.57	15.9	6.86	683	72	3.3	<1.0	<1.0	<1.0	*151*	66.2	<1.0	<1.0
DUP-01	9/21/2010	26.62	725.57	15.9	6.86	683	72	3.3	<1.0	<1.0	<1.0	*153*	64.9	<1.0	<1.0
	12/22/2010	28.10	724.09	9.7	7.22	694	36	4.6	<1.0	<1.0	<1.0	*143*	*85.9*	<1.0	<1.0
	3/17/2011	27.80	724.39	13.3	7.26	707	120	2.4	< 0.9	< 0.75	< 0.45	*109*	30.1	< 0.89	< 0.18
	7/6/2011	27.59	724.60	16.6	7.30	740	43	5.9	< 0.9	< 0.75	< 0.45	*77.8*	*86.6*	< 0.89	< 0.18
	9/22/2011	28.36	723.83	12.9	7.21	692	38	6.4	< 0.9	< 0.75	< 0.45	*84.8*	*73.9*	1.1	1.3
	12/21/2011	28.80	723.39	11.3	7.17	719	-46	4.8	< 0.9	1.5	< 0.45	*123*	*116*	< 0.89	1.4
	3/6/2012	29.21	722.98	11.3	7.25	756	-9	2.0	< 0.9	1.3	< 0.45	*103*	*102*	< 0.89	1.4
	6/6/2012	29.44	722.75	14.4	7.17	752	-30	3.0	< 0.9	1.1	< 0.45	*69.2*	*91.5*	< 0.89	< 0.18
	9/28/2012	31.18	721.01	12.4	7.21	675	13	1.5	< 0.9	1.2	< 0.45	*84.5*	55.3	< 0.89	*10*
	12/20/2012	31.62	720.57	10.0	7.15	727	86	1.9	< 0.9	1.3	< 0.45	*92.8*	*80.7*	< 0.89	*2.3*
	3/8/2013	31.00	721.19	10.4	7.29	655	36	0.5	< 0.9	< 0.75	< 0.45	*59.9*	31.2	< 0.89	*6*
	5/21/2013	27.00	725.19	13.5	7.21	689	57	0.9	< 0.44	< 0.28	< 0.47	*73.6*	37.9	< 0.89	*2.6*
	8/29/2013	26.42	725.77	14.8	7.18	645	133	8.3	< 0.44	< 0.28	< 0.47	*66.8*	45.8	< 0.89	< 0.18
	9/30/2013	27.29	724.90	14.0	7.26	588	154	7.3	< 0.44	0.34 J	< 0.47	*50.4*	20.6	< 0.37	0.26 J
	10/23/2013	27.76	724.43	11.6	7.69	567	90	7.7	< 0.44	< 0.28	< 0.47	*39.6*	15.6	< 0.37	< 0.18
	11/25/2013	28.15	724.04	10.3	7.39	479	39	5.1	< 0.44	< 0.28	< 0.47	*32.1*	16	< 0.37	< 0.18
	12/12/2013	28.43	723.76	8.6	7.46	486	-8	4.0	< 0.44	< 0.28	< 0.47	*29.4*	14.4	< 0.37	1.6
DUP-02	12/12/2013	28.43	723.76	8.6	7.46	486	-8	4.0	< 0.44	< 0.28	< 0.47	*27.7*	12.8	< 0.37	1.5
	3/13/2014	28.83	723.36	9.8	7.42	679	-88	2.1	< 0.44	< 0.28	< 0.47	*5.6*	26.5	< 0.37	< 0.18
LTMW-03A	3/11/2010	27.55	724.97	11.9	7.07	863	153	5.0	<2.0	<2.0	<2.0	*275*	53.1	2.2	<2.0
	6/25/2010	27.15	725.37	13.5	6.81	926	14	7.1	<2.0	<2.0	<2.0	*167*	30.8	<2.0	<2.0
	9/21/2010	27.03	725.49	15.8	6.73	770	90	3.8	<2.0	<2.0	<2.0	*56.6*	8	<2.0	<2.0
	12/22/2010	28.48	724.04	10.1	7.28	684	14	1.3	<1.0	<1.0	<1.0	*33.9*	6.5	<1.0	<1.0
	3/17/2011	28.17	724.35	12.9	7.37	682	-31	0.1	< 0.9	< 0.75	< 0.45	*10.2*	15.9	< 0.89	< 0.18
	7/6/2011	27.99	724.53	15.9	7.48	674	-101	0.4	< 0.9	< 0.75	< 0.45	1.4	55.5	< 0.89	*5.3*
	9/22/2011	28.74	723.78	12.5	7.46	623	-101	1.8	< 0.9	< 0.75	< 0.45	2.2	15.2	< 0.89	*10.2*
	12/21/2011	29.10	723.42	11.4	7.40	656	-122	1.9	< 0.9	< 0.75	< 0.45	2.5	2.4	< 0.89	*4.7*
	3/6/2012	29.61	722.91	11.4	7.46	727	-37	0.2	< 0.9	< 0.75	< 0.45	2.6	1.4	< 0.89	*4.7*
	6/6/2012	29.83	722.69	14.1	7.37	736	-76	0.3	< 0.9	< 0.75	< 0.45	2.8	1.8	< 0.89	*5.5*
	9/28/2012	31.59	720.93	11.8	7.35	704	-102	0.0	< 0.9	< 0.75	< 0.45	2.5	1.8	< 0.89	1.9
	12/20/2012	32.00	720.52	11.3	7.28	717	-89	0.1	< 0.9	< 0.75	< 0.45	2.2	1.3	< 0.89	1.7
	3/8/2013	31.40	721.12	10.3	7.38	695	-69	0.1	< 0.9	< 0.75	< 0.45	2.9	1.4	< 0.89	1.7
	5/21/2013	27.39	725.13	12.9	7.25	711	-75	0.3	< 0.44	< 0.28	< 0.47	1.9	< 0.42	< 0.37	< 0.18
	8/29/2013	26.81	725.71	14.7	7.21	698	-80	0.1	< 0.44	< 0.28	< 0.47	1.5	< 0.42	< 0.37	1.9
	12/12/2013	28.81	723.71	8.4	7.10	907	-98	0.0	< 0.44	< 0.28	< 0.47	< 0.36	5.1	< 0.37	*8.5*
	3/13/2014	29.23	723.29	8.9	7.07	673	-91	0.2	< 0.44	< 0.28	< 0.47	1.1	0.85 J	< 0.37	*5.1*

Notes: (1) Maximum Concentration Level (MCL) promulgated under the Safe Drinking Water Act.
(2) Limit established in 2009 Workplan
(3) < indicates analyte was not detected above the listed concentration
(4) J indicates estimated concentration. Reported result is between the method detection limit and the practical quantitation limit.
(5) ***Blue bold and italic*** values exceed the Long Term Cleanup Criteria

Table 7
Long Term Monitoring Wells on Hononegah Road - Data Summary
Former Warner Facility
Roscoe, Illinois

		Field Parameters							Volatile Organic Compounds						
Well	Date	Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH Std. Units	Spec. Cond. µmhos/cm	ORP mV	Dis. Oxygen mg/L	1,1,1-TCA µg/L	1,1-DCA µg/L	PCE µg/L	TCE µg/L	cis-1,2-DCE µg/L	trans-1,2-DCE µg/L	Vinyl Chloride µg/L
Long Term Groundwater Clean-up Goal - All LTMW Wells [1]									*200*	*200*	*5*	*5*	*70*	*100*	*2*
Non-potable Intermediate Groundwater Cleanup Criteria [2]												1,900	6,100		
LTMW-04	3/12/2010	30.14	718.36	11.7	7.35	995	86	4.0	<1.0 [4]	<1.0	<1.0	3.0	1.2	<1.0	<1.0
	6/24/2010	29.60	718.90	13.6	6.84	866	12	6.9	<1.0	<1.0	<1.0	3.7	1.6	<1.0	<1.0
	9/22/2010	29.80	718.70	13.4	7.31	806	13	5.8	1.1	<1.0	<1.0	3.5	1.0	<1.0	<1.0
	12/22/2010	30.75	717.75	10.4	7.25	821	-6	4.4	<1.0	<1.0	<1.0	2.5	<1.0	<1.0	<1.0
	3/15/2011	30.23	718.27	11.5	7.32	873	62	6.8	< 0.9	< 0.75	< 0.45	3.5	1.4	< 0.89	< 0.18
	7/5/2011	30.45	718.05	13.0	7.37	832	27	7.9	< 0.9	< 0.75	< 0.45	3.7	2.5	< 0.89	< 0.18
	9/21/2011	31.30	717.20	13.3	7.24	802	16	8.1	< 0.9	< 0.75	< 0.45	3.4	2.0	< 0.89	< 0.18
	12/22/2011	31.25	717.25	10.8	7.26	804	-29	6.3	1.0	< 0.75	< 0.45	4.5	4.8	< 0.89	< 0.18
DUP-02	12/22/2011	31.25	717.25	10.8	7.26	804	-29	6.3	< 0.9	< 0.75	< 0.45	4.6	4.6	< 0.89	< 0.18
	3/1/2012	31.72	716.78	10.9	7.34	871	70	5.0	< 0.9	< 0.75	< 0.45	*5.7* [5]	5.2	< 0.89	< 0.18
	6/6/2012	31.73	716.77	12.5	7.3	866	26	5.0	< 0.9	< 0.75	< 0.45	*6.4*	5.8	< 0.89	< 0.18
	9/26/2012	33.58	714.92	14.1	7.28	825	159	6.5	1.0 J	< 0.75	< 0.45	*7.1*	8	< 0.89	< 0.18
DUP-01	9/26/2012	33.58	714.92	14.1	7.28	825	159	6.5	1.0	< 0.75	< 0.45	*7.1*	8.1	< 0.89	< 0.18
	12/19/2012	33.55	714.95	11.6	7.35	844	148	7.3	< 0.9	< 0.75	< 0.45	*8.2*	7.8	< 0.89	< 0.18
DUP-01	12/19/2012	33.55	714.95	11.6	7.35	844	148	7.3	< 0.9	< 0.75	< 0.45	*7.9*	7.7	< 0.89	< 0.18
	3/8/2013	32.59	715.91	11.3	7.25	1287	180	5.3	< 0.9	< 0.75	< 0.45	*8*	7.1	< 0.89	< 0.18
DUP-01	3/8/2013	32.59	715.91	11.3	7.25	1287	180	5.3	< 0.9	< 0.75	< 0.45	*8.3*	8.4	< 0.89	< 0.18
	5/21/2013	28.75	719.75	13.8	7.26	807	117	5.8	1.1	< 0.28	< 0.47	*11.5*	9.5	< 0.37	< 0.18
DUP-01	5/21/2013	28.75	719.75	13.8	7.26	807	117	5.8	1.1	< 0.28	< 0.47	*11.7*	9.4	< 0.37	< 0.18
	8/27/2013	29.94	718.56	15.6	7.29	831	116	6.2	1.0	< 0.28	< 0.47	*8.6*	5.6	< 0.37	< 0.18
DUP-01	8/27/2013	29.94	718.56	15.6	7.29	831	116	6.2	1.1	< 0.28	< 0.47	*8.7*	5.7	< 0.37	< 0.18
	12/10/2013	31.32	717.18	10.1	7.32	818	87	6.3	1.2	< 0.28	< 0.47	*7.9*	6.3	< 0.37	< 0.18
DUP-01	12/10/2013	31.32	717.18	10.1	7.32	818	87	6.3	1.0	< 0.28	< 0.47	*7.2*	5.8	< 0.37	< 0.18
	3/11/2014	31.62	716.88	9.4	7.29	1610	-90	5.7	0.81 J	< 0.28	< 0.47	*7.5*	5.5	< 0.37	< 0.18
DUP-01	3/112014	31.62	716.88	9.4	7.29	1610	-90	5.7	0.77 J	< 0.28	< 0.47	*7.6*	5.6	< 0.37	< 0.18
LTMW-05	3/12/2010	30.92	718.43	11.7	724.00	811	108	5.0	< 0.9	< 0.75	< 0.45	*12.3*	6.2	< 0.89	< 0.18
	6/24/2010	30.40	718.95	13.3	6.92	895	14	6.4	1.1	< 0.75	< 0.45	*10.9*	5.3	< 0.89	< 0.18
	9/22/2010	NM	NM	NM	NM	NM	NM	NM	1.5	< 0.75	< 0.45	*9.2*	4.0	< 0.89	< 0.18
	12/22/2010	31.59	717.76	10.6	7.28	797	70	5.1	< 0.9	< 0.75	< 0.45	*7.3*	3.9	< 0.89	< 0.18
	3/16/2011	31.03	718.32	11.7	7.34	856	153	7.0	< 0.9	< 0.75	< 0.45	*9.4*	4.6	< 0.89	< 0.18
	7/5/2011	31.27	718.08	13.5	7.36	830	53	7.4	< 0.9	< 0.75	< 0.45	*9.7*	6.2	< 0.89	< 0.18
	9/21/2011	32.10	717.25	13.0	7.23	792	63	8.1	1	< 0.75	< 0.45	*9.9*	5.2	< 0.89	< 0.18
	12/22/2011	32.05	717.30	9.9	7.25	798	5	6.1	< 0.9	< 0.75	< 0.45	*10.8*	9.0	< 0.89	< 0.18
	3/1/2012	32.50	716.85	10.8	7.29	871	81	5.0	< 0.9	< 0.75	< 0.45	*12.1*	9.2	< 0.89	< 0.18
	6/6/2012	32.50	716.85	12.8	7.30	865	42	5.0	4.3	< 0.75	< 0.45	*14.1*	10.4	< 0.89	< 0.18
	9/27/2012	34.39	714.96	12.0	7.25	830	201	6.6	< 0.9	< 0.75	< 0.45	*14*	11.8	< 0.89	< 0.18
	12/19/2012	34.29	715.06	11.6	7.35	839	169	7.2	< 0.9	< 0.75	< 0.45	*13.6*	9.6	< 0.89	< 0.18
	3/7/2013	33.30	716.05	9.5	7.28	11338	195	6.5	< 0.9	< 0.75	< 0.45	*13.8*	9.4	< 0.89	< 0.18
	5/20/2013	29.52	719.83	13.6	7.35	800	43	0.3	0.65 J	< 0.28	< 0.47	*5.3*	2.5	< 0.37	< 0.18
	8/27/2013	30.75	718.60	16.5	7.28	850	155	6.1	< 0.70	< 0.28	< 0.47	*12.9*	7.8	< 0.37	< 0.18
	12/10/2013	32.13	717.22	10.4	7.32	828	114	5.8	0.63 J	< 0.28	< 0.47	*12.9*	8.3	< 0.37	< 0.18
	3/11/2014	32.38	716.97	10.1	7.32	844	-111	6.0	< 0.44	< 0.28	< 0.47	*10.8*	5.7	< 0.37	< 0.18

Table 7
Long Term Monitoring Wells on Hononegah Road - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Volatile Organic Compounds						
		Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Long Term Groundwater Clean-up Goal - All LTMW Wells [1]									*200*	*200*	*5*	*5*	*70*	*100*	*2*
Non-potable Intermediate Groundwater Cleanup Criteria [2]												1,900	6,100		
LTMW-06	3/12/2010	31.80	718.15	11.7	7.23	949	94	7.0	<1.0	<1.0	<1.0	***40.4***	14.0	<1.0	<1.0
	6/25/2010	31.28	718.67	14.1	6.75	1030	20	7.8	<1.0	<1.0	<1.0	***35.4***	13.0	<1.0	<1.0
	9/22/2010	31.50	718.45	13.5	7.19	857	41	5.7	<1.0	<1.0	<1.0	***33.2***	9.5	<1.0	<1.0
	12/22/2010	32.40	717.55	10.4	7.27	864	71	5.7	<1.0	<1.0	<1.0	***28.1***	9.9	<1.0	<1.0
	3/16/2011	31.88	718.07	12.0	7.27	1180	151	8.4	< 0.9	< 0.75	< 0.45	***32***	7.3	< 0.89	< 0.18
	7/5/2011	32.12	717.83	13.6	7.32	1121	70	9.2	< 0.9	< 0.75	< 0.45	***20.1***	5.6	< 0.89	< 0.18
	9/21/2011	32.96	716.99	12.8	7.21	939	74	9.9	< 0.9	< 0.75	< 0.45	***26.8***	7.5	< 0.89	< 0.18
	12/22/2011	32.90	717.05	9.9	7.14	1449	12	7.9	< 0.9	< 0.75	< 0.45	***28***	9.3	< 0.89	< 0.18
	3/1/2012	33.34	716.61	11.0	7.77	937	89	5.0	< 0.9	< 0.75	< 0.45	***22***	11.5	< 0.89	< 0.18
	6/6/2012	33.34	716.61	13.2	7.33	902	59	4.0	4.3	< 0.75	< 0.45	***29.3***	15.0	< 0.89	< 0.18
	9/27/2012	35.20	714.75	13.7	7.24	919	185	7.7	< 0.9	< 0.75	< 0.45	***40.4***	26.7	< 0.89	< 0.18
	12/19/2012	35.13	714.82	11.2	7.26	1305	176	8.7	< 0.9	< 0.75	< 0.45	***40.5***	17.6	< 0.89	< 0.18
	3/7/2013	34.13	715.82	9.5	7.32	8772	191	7.6	< 0.9	< 0.75	< 0.45	***34.4***	19.6	< 0.89	< 0.18
	5/20/2013	30.40	719.55	14.2	7.31	914	100	3.3	< 0.44	< 0.28	< 0.47	***32***	16.9	< 0.37	< 0.18
	8/27/2013	31.63	718.32	15.8	7.30	900	196	7.1	< 0.44	< 0.28	< 0.47	***38.6***	16.9	< 0.37	< 0.18
	12/10/2013	32.95	717.00	9.6	7.25	1442	131	8.1	< 0.44	< 0.28	< 0.47	***41.9***	20.4	< 0.37	< 0.18
	3/11/2014	33.21	716.74	10.0	7.33	941	-98	7.7	< 0.44	< 0.28	< 0.47	***28.3***	13.7	< 0.37	< 0.18
LTMW-07	3/12/2010	31.97	718.10	11.8	7.26	819	-19	5.0	<1.0	<1.0	<1.0	***14.1***	9.1	<1.0	<1.0
DUP-02	3/12/2010	31.97	718.10	11.8	7.26	819	-19	5.0	<1.0	<1.0	<1.0	***14.4***	8.9	<1.0	<1.0
	6/25/2010	31.47	718.60	12.6	6.84	915	17	8.0	<1.0	<1.0	<1.0	***15.5***	9.7	<1.0	<1.0
	9/22/2010	31.72	718.35	13.6	7.23	802	58	4.8	<1.0	<1.0	<1.0	***19.3***	10.6	<1.0	<1.0
	12/22/2010	32.57	717.50	10.3	7.3	804	68	5.3	<1.0	<1.0	<1.0	***14.4***	10.7	<1.0	<1.0
	3/16/2011	32.05	718.02	12.3	7.33	858	140	6.6	< 0.9	< 0.75	< 0.45	***12.0***	7.8	< 0.89	< 0.18
DUP-01	3/16/2011	32.05	718.02	12.3	7.33	858	140	6.6	< 0.9	< 0.75	< 0.45	***11.9***	7.6	< 0.89	< 0.18
	7/6/2011	32.36	717.71	12.7	7.42	848	39	7.5	< 0.9	< 0.75	< 0.45	***11.1***	8	< 0.89	< 0.18
	9/21/2011	33.12	716.95	12.2	7.24	848	80	8.2	< 0.9	< 0.75	< 0.45	***11.5***	5.8	< 0.89	< 0.18
	12/22/2011	33.04	717.03	9.6	7.26	835	17	6.2	< 0.9	< 0.75	< 0.45	***7.5***	4.8	< 0.89	< 0.18
	3/1/2012	33.51	716.56	10.4	7.29	919	95	5.0	< 0.9	< 0.75	< 0.45	***5.7***	3.4	< 0.89	< 0.18
	6/6/2012	33.52	716.55	12.7	7.27	928	61	4.0	4	< 0.75	< 0.45	4.9	2.2	< 0.89	< 0.18
	9/27/2012	35.38	714.69	12.6	7.27	877	183	7.1	<0.9	< 0.75	< 0.45	3.8	2	< 0.89	< 0.18
	12/19/2012	35.24	714.83	10.9	7.36	912	183	8.0	<0.9	< 0.75	< 0.45	2.8	1.1	< 0.89	< 0.18
	3/7/2013	34.29	715.78	9.5	7.32	8883	196	7.4	<0.9	< 0.75	< 0.45	2.1	< 0.83	< 0.89	< 0.18
	5/20/2013	30.61	719.46	15.1	7.38	833	48	1.1	< 0.44	< 0.28	< 0.47	3.7	1.9	< 0.37	< 0.18
	8/27/2013	31.85	718.22	15.5	7.30	893	214	6.9	< 0.44	< 0.28	< 0.47	2.2	0.71 J	< 0.37	< 0.18
	12/10/2013	33.14	716.93	9.0	7.35	894	62	7.0	< 0.44	< 0.28	< 0.47	1.5	0.47 J	< 0.37	< 0.18
	3/11/2014	33.36	716.71	10.4	7.34	909	-104	6.9	< 0.44	< 0.28	< 0.47	1.1	< 0.42	< 0.37	< 0.18

Notes: (1) Maximum Concentration Level (MCL) promulgated under the Safe Drinking Water Act.
(2) Limit established in 2009 Workplan
(3) NM indicates not measured
(4) < indicates analyte was not detected above the listed concentration
(5) J indicates estimated concentration. Reported result is between the method detection limit and the practical quantitation limit.
(6) ***Blue bold and italic*** values exceed the Long Term Cleanup Criteria

Table 8
Long Term Monitoring Wells on Edgemere Terrace - Data Summary
Former Warner Facility
Roscoe, Illinois

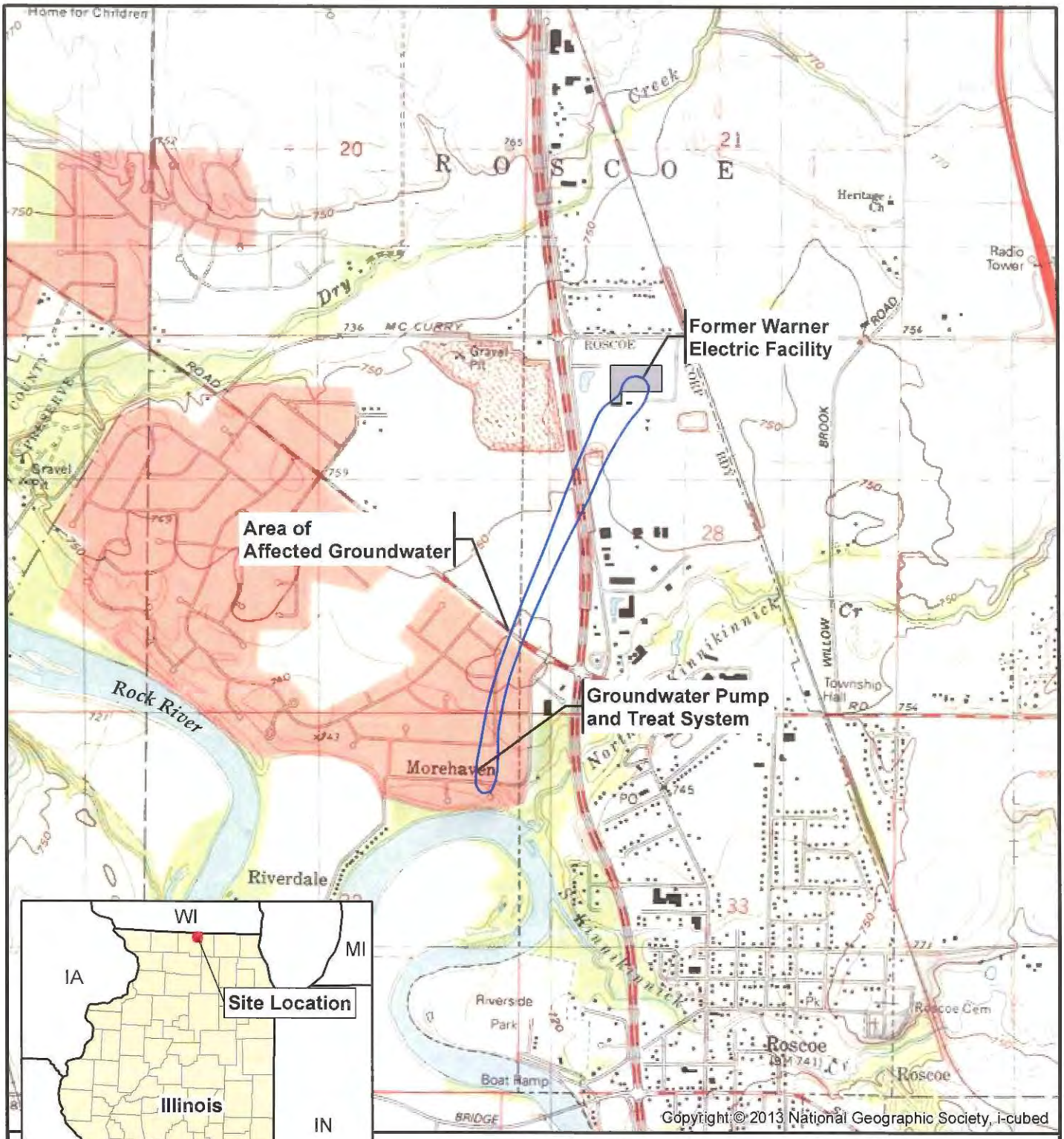
Well	Date	Field Parameters							Volatile Organic Compounds						
		Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Long Term Clean-up Criteria - All LTMW Wells [1]									*200*	*200*	*5*	*5*	*70*	*100*	*2*
Surface Water Discharge Intermediate Clean-up Criteria [2]									*76*	*47*	*45*	*25*	*620*	*970*	*120*
LTMW-08	3/8/2010	17.73	711.43	10.4	7.17	718	25	6.4	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0
	6/23/2010	16.08	713.08	13.1	6.80	930	12	8.5	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0
DUP-01	6/23/2010	16.08	713.08	13.1	6.80	930	12	8.5	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0
	9/21/2010	17.42	711.74	14.6	7.21	781	31	5.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/22/2010	17.04	712.12	10.3	7.31	775	49	7.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2011	16.34	712.82	10.8	7.34	828	99	7.0	< 0.9	< 0.75	< 0.45	1.1	< 0.83	< 0.89	< 0.18
	6/30/2011	17.66	711.50	13.2	7.27	803	49	8.7	< 0.9	< 0.75	< 0.45	1.2	< 0.83	< 0.89	< 0.18
	9/21/2011	18.75	710.41	13.1	7.24	785	55	9.4	< 0.9	< 0.75	< 0.45	1.0	< 0.83	< 0.89	< 0.18
DUP-01	9/21/2011	18.75	710.41	13.1	7.24	785	55	9.4	< 0.9	< 0.75	< 0.45	1.1	< 0.83	< 0.89	< 0.18
	12/20/2011	17.63	711.53	10.7	7.03	793	133	7.9	< 0.9	< 0.75	< 0.45	1.4	< 0.83	< 0.89	< 0.18
DUP-01	12/20/2011	17.63	711.53	10.7	7.03	793	133	7.9	< 0.9	< 0.75	< 0.45	1.4	< 0.83	< 0.89	< 0.18
	2/28/2012	18.43	710.73	9.6	7.19	861	100	9.4	< 0.9	< 0.75	< 0.45	1.3	< 0.83	< 0.89	< 0.18
	6/5/2012	18.39	710.77	13.2	7.23	861	105	5.0	< 0.9	< 0.75	< 0.45	1.2	< 0.83	< 0.89	< 0.18
DUP-01	6/5/2012	18.39	710.77	13.2	7.23	861	105	5.0	< 0.9	< 0.75	< 0.45	1.4	< 0.83	< 0.89	< 0.18
	9/26/2012	20.25	708.91	NA	7.27	825	183	5.5	< 0.9	< 0.75	< 0.45	2	1.1	< 0.89	< 0.18
	12/19/2012	19.61	709.55	10.8	7.28	832	194	6.5	< 0.9	< 0.75	< 0.45	2.4	1.5	< 0.89	< 0.18
	3/6/2013	18.52	710.64	7.8	7.32	807	166	5.8	< 0.9	< 0.75	< 0.45	3.1	2.1	< 0.89	< 0.18
	5/20/2013	15.02	714.14	13.5	7.30	764	-248	0.2	< 0.44	< 0.28	< 0.47	1	< 0.42	< 0.37	< 0.18
	8/26/2013	18.08	711.08	16.9	7.27	802	114	6.4	0.56 J	< 0.28	< 0.47	1.5	< 0.42	< 0.37	< 0.18
	12/9/2013	18.43	710.73	9.4	7.26	837	82	6.3	0.61 J	< 0.28	< 0.44	2.1	0.96 J	< 0.37	< 0.18
	3/10/2014	18.75	710.41	10.3	7.39	835	-154	5.9	0.51 J	< 0.28	< 0.47	1.9	0.78 J	< 0.37	< 0.18
LTMW-09	3/8/2010	18.12	711.19	11.1	6.41	797	58	2.0	1.1	<1.0	<1.0	*9.3* [5]	6.5	<1.0	<1.0
DUP-01	3/8/2010	18.12	711.19	11.1	6.41	797	58	2.0	1.1	<1.0	<1.0	*9.6* [5]	6.4	<1.0	<1.0
	6/24/2010	16.42	712.89	13.4	6.74	1080	18	3.4	1.1	<1.0	<1.0	*7.7*	3.4	<1.0	<1.0
	9/21/2010	17.86	711.45	14.5	7.20	890	85	4.6	1.1	<1.0	<1.0	*7.1*	2.4	<1.0	<1.0
	12/22/2010	17.45	711.86	10.7	7.30	891	71	5.9	<1.0	<1.0	<1.0	*5.4*	2.8	<1.0	<1.0
	3/15/2011	16.75	712.56	11.4	7.33	944	177	7.5	< 0.9	< 0.75	< 0.45	*6.8*	2.9	< 0.89	< 0.18
	7/1/2011	18.14	711.17	14.3	7.32	980	78	8.6	1.0	< 0.75	< 0.45	*6.4*	1.9	< 0.89	< 0.18
	9/21/2011	19.23	710.08	12.7	7.25	881	72	10.3	< 0.9	< 0.75	< 0.45	*6.4*	1.6	< 0.89	< 0.18
	12/20/2011	18.09	711.22	11.1	7.19	902	134	7.5	< 0.9	< 0.75	< 0.45	*6.1*	2.5	< 0.89	< 0.18
	2/29/2012	18.86	710.45	11.7	7.32	974	135	6.0	< 0.9	< 0.75	< 0.45	*5.8*	2.2	< 0.89	< 0.18
DUP-01	2/29/2012	18.86	710.45	11.7	7.32	974	135	6.0	< 0.9	< 0.75	< 0.45	*5.8*	2.1	< 0.89	< 0.18
	6/5/2012	18.88	710.43	14.2	7.31	970	102	4.0	< 0.9	< 0.75	< 0.45	*5.4*	2.4	< 0.89	< 0.18
	9/26/2012	20.65	708.66	15.1	7.26	1016	149	6.8	< 0.90	< 0.75	< 0.45	*5.6*	2.4	< 0.89	< 0.18
	12/19/2012	19.99	709.32	11.8	7.29	1034	187	8.4	1.1	< 0.75	< 0.45	*7.3*	3	< 0.89	< 0.18
	3/6/2013	18.99	710.32	9.3	7.30	1016	170	8.0	0.92 J	< 0.75	< 0.45	*9.4*	4.4	< 0.89	< 0.18
	5/20/2013	15.60	713.71	14.4	7.30	1019	186	7.2	0.77 J	< 0.28	< 0.47	*7.7*	3.3	< 0.37	< 0.18
	8/26/2013	18.64	710.67	15.0	7.29	969	151	7.3	0.86 J	< 0.28	< 0.47	*5.8*	1.7	< 0.37	< 0.18
	12/9/2013	18.92	710.39	10.2	7.26	996	78	7.2	0.79 J	< 0.28	< 0.47	*5.4*	2.6	< 0.37	< 0.18
	3/10/2014	19.21	710.10	9.5	7.39	994	-159	7.5	0.60 J	< 0.28	< 0.47	*5.4*	2.4	< 0.37	< 0.18

Table 8
Long Term Monitoring Wells on Edgemere Terrace - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Volatile Organic Compounds						
		Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Long Term Clean-up Criteria - All LTMW Wells [1]									*200*	*200*	*5*	*5*	*70*	*100*	*2*
Surface Water Discharge Intermediate Clean-up Criteria [2]									76	47	45	25	620	970	120
LTMW-10	3/9/2010	14.80	711.28	11.2	7.24	1170	92	4.0	<1.0	<1.0	<1.0	*21.9*	12.4	<1.0	<1.0
	6/24/2010	12.99	713.09	13.7	6.78	1150	16	8.7	1.4	<1.0	<1.0	*17.6*	8.5	<1.0	<1.0
	9/21/2010	14.40	711.68	14.9	7.17	927	66	5.2	1.5	<1.0	<1.0	*15.2*	6.1	<1.0	<1.0
	12/22/2010	14.01	712.07	9.9	7.26	1112	76	6.3	<1.0	<1.0	<1.0	*20.8*	12	<1.0	<1.0
DUP-02	12/22/2010	14.01	712.07	9.9	7.26	1112	76	6.3	<1.0	<1.0	<1.0	*19.0*	9.6	<1.0	<1.0
	3/15/2011	13.31	712.77	11.0	7.28	1175	176	7.3	< 0.9	< 0.75	< 0.45	*21.4*	10	< 0.89	< 0.18
	7/1/2011	14.65	711.43	14.5	7.23	1029	77	8.8	1.3	< 0.75	< 0.45	*16.4*	4.4	< 0.89	< 0.18
	9/21/2011	15.73	710.35	13.4	7.20	1033	74	8.8	< 0.9	< 0.75	< 0.45	*23.4*	9.8	< 0.89	< 0.18
	12/20/2011	14.65	711.43	10.7	7.19	943	144	8.2	< 0.9	< 0.75	< 0.45	*21.7*	13.4	< 0.89	< 0.18
	2/29/2012	15.37	710.71	11.2	7.27	1002	134	6.0	< 0.9	< 0.75	< 0.45	*20.4*	11.1	< 0.89	< 0.18
	6/5/2012	15.40	710.68	13.9	7.21	999	89	5.0	< 0.9	< 0.75	< 0.45	*19.4*	10.5	< 0.89	< 0.18
	9/26/2012	17.14	708.94	13.2	7.25	986	138	7.01	< 0.9	< 0.75	< 0.45	*9.9*	7.4	<0.89	<0.18
	12/19/2012	16.48	709.60	11.1	7.30	1003	175	8.5	< 0.9	< 0.75	< 0.45	*7.4*	5.1	<0.89	<0.18
	3/16/2013	15.50	710.58	8.4	7.32	946	158	7.5	< 0.9	< 0.75	< 0.45	*6*	2.7	<0.89	<0.18
	5/20/2013	12.22	713.86	14.7	7.26	969	176	7.8	< 0.44	< 0.28	< 0.47	*14.9*	7.7	< 0.37	< 0.18
	8/26/2013	15.15	710.93	15.4	7.27	1010	144	7.5	< 0.44	< 0.28	< 0.47	*20.6*	9	< 0.37	< 0.18
	12/9/2013	15.40	710.68	9.3	7.28	947	97	7.3	< 0.44	< 0.28	< 0.47	*10*	4.6	< 0.37	< 0.18
	3/10/2014	15.72	710.36	11.7	7.41	939	-144	6.9	< 0.44	< 0.28	< 0.47	*7.1*	3.1	< 0.37	< 0.18
LTMW-11	3/9/2010	20.80	711.47	10.9	7.28	894	181	4.0	<1.0	<1.0	<1.0	*12.6*	9.6	<1.0	<1.0
	6/23/2010	19.35	712.92	14.4	6.85	1170	12	7.4	<1.0	<1.0	<1.0	*18*	11.3	<1.0	<1.0
	9/21/2010	20.72	711.55	13.5	7.19	943	93	5.2	<1.0	<1.0	<1.0	*20.4*	9.2	<1.0	<1.0
	12/22/2010	20.30	711.97	10.0	7.29	836	65	5.4	<1.0	<1.0	<1.0	*15.5*	10.2	<1.0	<1.0
	3/15/2011	19.62	712.65	11.3	7.31	885	177	5.9	< 0.9	< 0.75	< 0.45	*15.8*	8.9	< 0.89	< 0.18
	7/5/2011	21.10	711.17	13.0	7.33	933	49	7.3	< 0.9	< 0.75	< 0.45	*19.1*	11.1	< 0.89	< 0.18
	9/21/2011	21.98	710.29	13.0	7.23	808	76	7.2	< 0.9	< 0.75	< 0.45	*16*	7.7	< 0.89	< 0.18
	12/20/2011	20.94	711.33	10.0	7.25	831	144	7.1	< 0.9	< 0.75	< 0.45	*9.7*	6.7	< 0.89	< 0.18
	2/29/2012	21.62	710.65	11.7	7.27	917	130	7.0	< 0.9	< 0.75	< 0.45	*8.9*	4.9	< 0.89	< 0.18
	6/6/2012	21.70	710.57	12.4	7.33	924	13	4.0	< 0.9	< 0.75	< 0.45	*8.1*	4.3	< 0.89	< 0.18
	9/26/2012	23.39	708.88	12.9	7.27	904	154	6.5	< 0.9	< 0.75	< 0.45	4.1	1.8	< 0.89	< 0.18
	12/19/2012	22.72	709.55	11.0	7.33	938	181	7.4	< 0.9	< 0.75	< 0.45	2.1	< 0.83	< 0.89	< 0.18
	3/16/2013	21.79	710.48	8.5	7.32	937	177	6.8	< 0.9	< 0.75	< 0.45	1.4	< 0.83	< 0.89	< 0.18
	5/20/2013	18.53	713.74	14.1	6.81	131	34	0.2	< 0.44	< 0.28	< 0.47	1.1	0.52 J	< 0.37	< 0.18
	8/26/2013	21.40	710.87	14.0	7.30	910	168	6.8	< 0.44	< 0.28	< 0.47	*10.9*	4.6	< 0.37	< 0.18
	12/9/2013	21.56	710.71	5.8	7.31	895	123	6.5	< 0.44	< 0.28	< 0.47	3.4	1.5	< 0.37	< 0.18
	3/10/2014	21.96	710.31	8.9	7.41	888	-142	5.6	< 0.44	< 0.28	< 0.47	2.5	0.79 J	< 0.37	< 0.18

Notes: (1) Maximum Concentration Level (MCL) promulgated under the Safe Drinking Water Act.
(2) Limit established in 2009 Workplan
(3) NM indicates not measured
(4) < indicates analyte was not detected above the listed concentration
(5) J indicates estimated concentration. Reported result is between the method detection limit and the practical quantitation limit.
(6) ***Blue bold and italic*** values exceed the Long Term Cleanup Criteria

Figures



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Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2014-02-18

Site Location Map

AECOM

Figure: 1

Project Management Initials: Designer: EM/ftc ANSI B 11" x 17"

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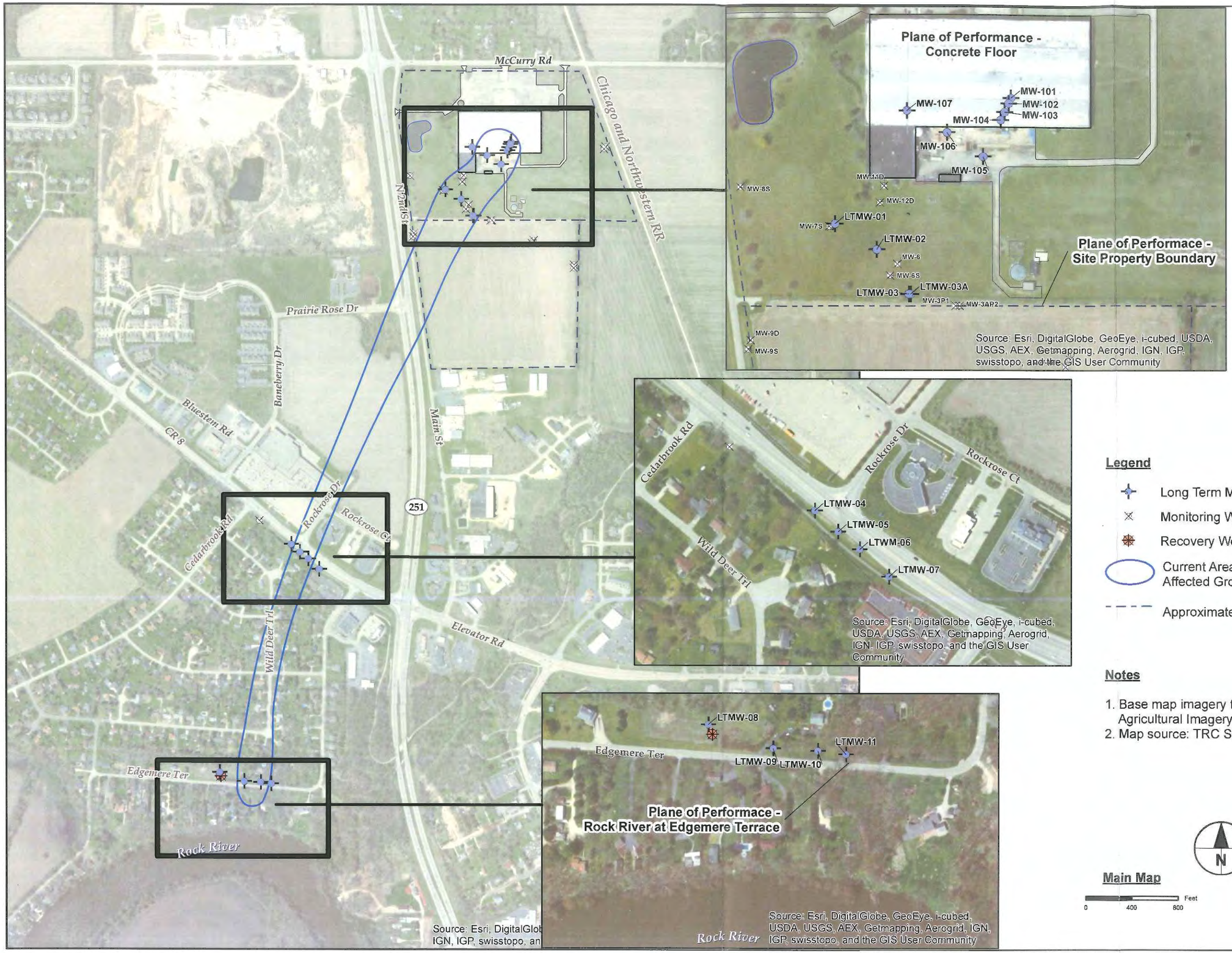


Legend

- Long Term Monitoring Well
- Monitoring Well
- Recovery Well
- Current Area of Affected Groundwater
- Approximate Property Line

Notes

1. Base map imagery from USDA-National Agricultural Imagery Program.
2. Map source: TRC Solutions, December 2011.

N

Main Map 0 400 800 Feet

Inset Maps 0 150 300 Feet

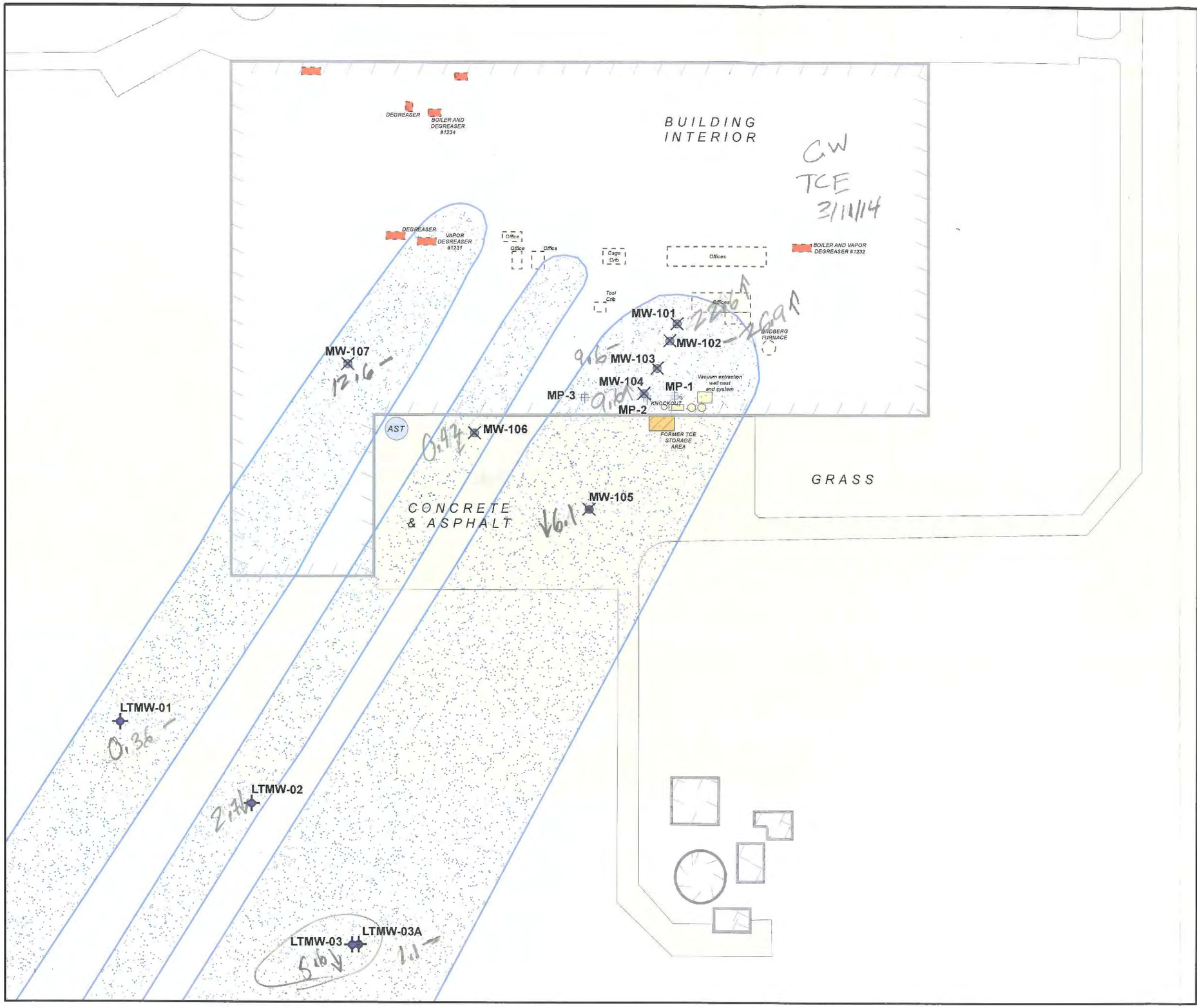
AECOM

Figure: 2

Planes of Performance and Monitoring Well Locations

Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2014-02-18

Project Management Initials: Designer: EM/ftc ANSI B 11" x 17"



Legend

- Source Area Monitoring Well
- Long Term Monitoring Well
- Monitoring Points
- Area of Affected Groundwater
- Interior Features
- Former Degreaser Location
- Former TCE Storage Area
- Soil Gas Extraction System

Notes

1. Monitoring points location by GPS, "Distance-From-Point" measurements or from approximate location.
2. Map source: TRC Solutions, December 2011.

N

0 50 100 200 Feet

AECOM

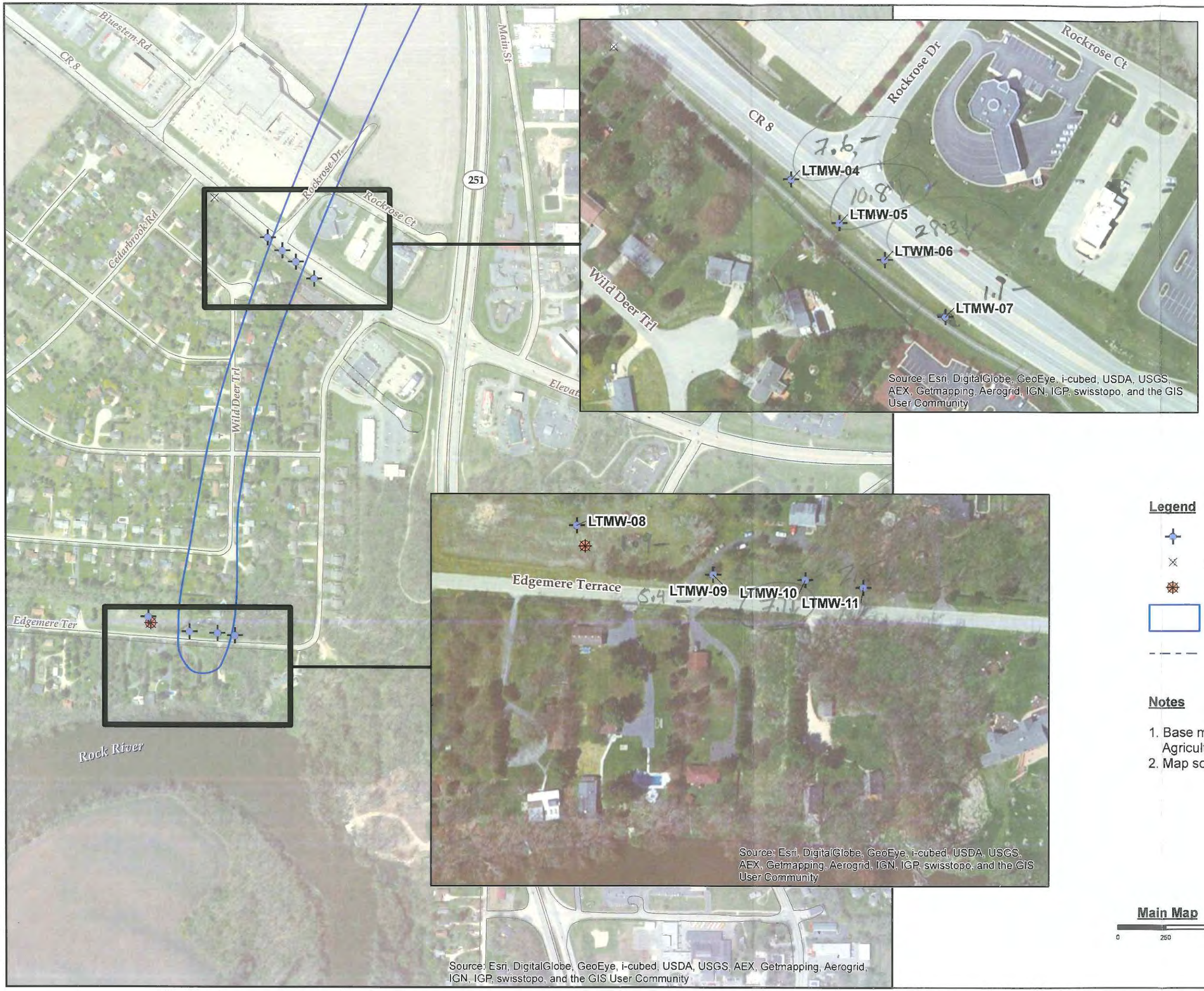
Figure: 3

Source Area Monitoring Wells

Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2012-10-25

L:...\reference data\Data\Colorado\60272149\MXD\Fig3_SourceAreaMW.mxd

TCE
3/11/14



Legend

- Long Term Monitoring Well
- Monitoring Well
- Recovery Well
- Current Area of Affected Groundwater
- Approximate Property Line

Notes

1. Base map imagery from USDA-National Agricultural Imagery Program.
2. Map source: TRC Solutions, December 2011.

Main Map 0 250 500 Feet

Inset Maps 0 75 150 Feet

Long Term Monitoring Wells - Hononegah Road and Edgemere Terrace

Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2012-10-25

AECOM

Figure: 4

Project Management Initials: Designer: EM/ftc ANSI B 11" x 17"

L:\Reference data\Data\Colorado\60272149\MXD\Fig4_LTMWNetwork-Hononegah_Edgemere.mxd

ANSI B 11" x 17"

Project Management Initials: Designer: EM/ftc

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6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

B C D E

DEGREASER

BOILER AND DEGREASER #1234

Gallery 1 (66 Wells)

DEGREASER

VAPOR DEGREASER #1231

Office

Office

Office

Gallery 2 (22 Wells)

Cage Crib

Offices

BOILER AND VAPOR DEGREASER #1232

Tool Crib

Offices

MW-101

MW-102

LINDBERG FURNACE

Gallery 3 (81 (+24 Pilot Test) Wells)

MW-107

MW-103

Vacuum extraction well nest and system

MW-104

MP-1

MP-2

MP-3

KNOCKOUT

BUILDING INTERIOR

BUILDING EXTERIOR

AST

#2

MW-106

Gallery 4 (68 Wells)

FORMER TCE STORAGE AREA

#1

Gallery 5 (63 Wells)

MW-105

GRASS

CONCRETE & ASPHALT

Legend

- Injection Well
- Injection Well, Pilot Test
- Injection Gallery Area
- Source Area Monitoring Well
- Long Term Monitoring Well
- Monitoring Point
- Building I-Beam
- Building Column
- Interior Features
- Former TCE Storage Area
- Soil Gas Extraction System
- Area of Affected Groundwater

Notes

1. Monitoring points located by GPS, "Distance-From-Point" measurements or from approximation.
2. Map source: TRC Solutions, December, 2011.

N

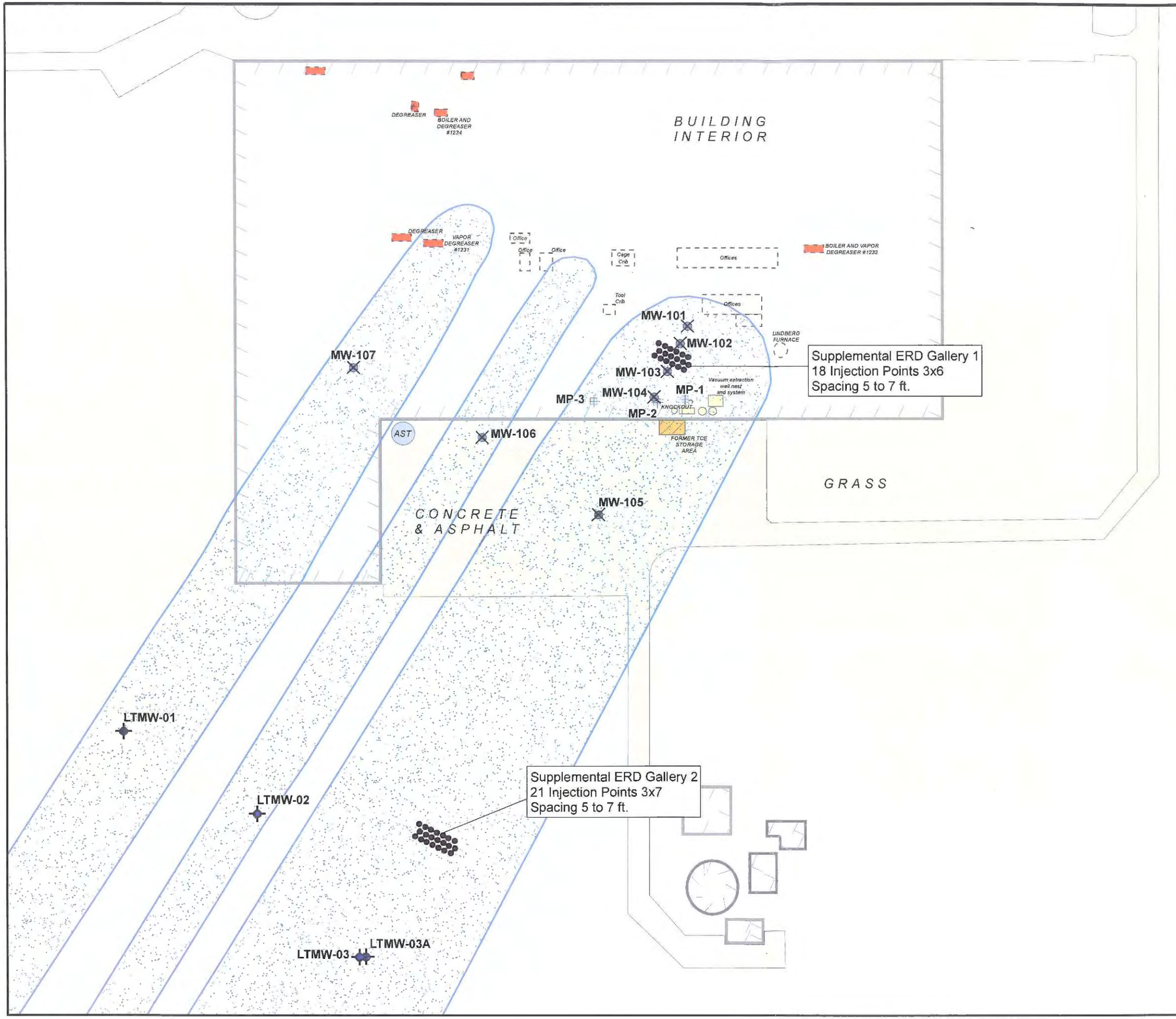
0 25 50 100 Feet

AECOM

Figure: 5

Enhanced Reductive Dechlorination Injection Galleries - 2010

Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2012-10-19



Legend

- Source Area Monitoring Well
- Long Term Monitoring Well
- Monitoring Points
- Area of Affected Groundwater
- Interior Features
- Former Degreaser Location
- Former TCE Storage Area
- Soil Gas Extraction System

Notes

1. Monitoring points location by GPS, "Distance-From-Point" measurements or from approximate location.
2. Map source: TRC Solutions, December 2011.

N

0 50 100 200 Feet

AECOM

Figure: 6

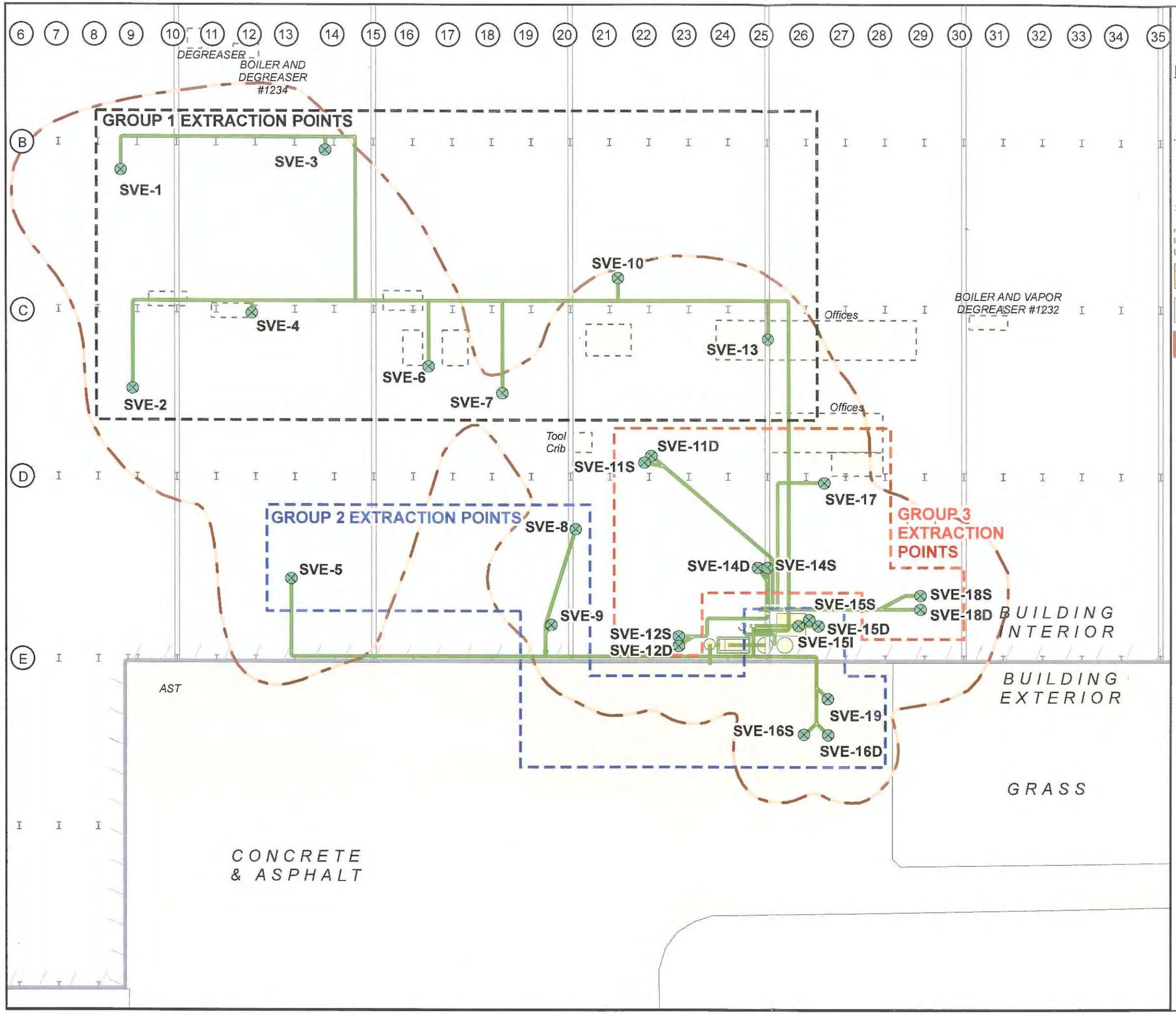
Supplemental Enhanced Reductive Dechlorination Injection Galleries - 2013

Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2012-10-25

ANSI B 11" x 17"

Project Management Initials: Designer: EM/ftc

L:\Reference data\Data\Colorado\60272149\MXD\Fig7_SVEPipingLayout.mxd



Legend

- SVE Well Location
- SVE System Pipeline
- Building I-Beam
- Building Column
- Interior Features
- Former TCE Storage Area
- Soil Gas Extraction System
- Limits of Soil Requiring SVE Remediation

Notes

1. Monitoring points located by GPS, "Distance-From-Point" measurements or from approximation.
2. Map source: TRC Solutions, December 2011.

N

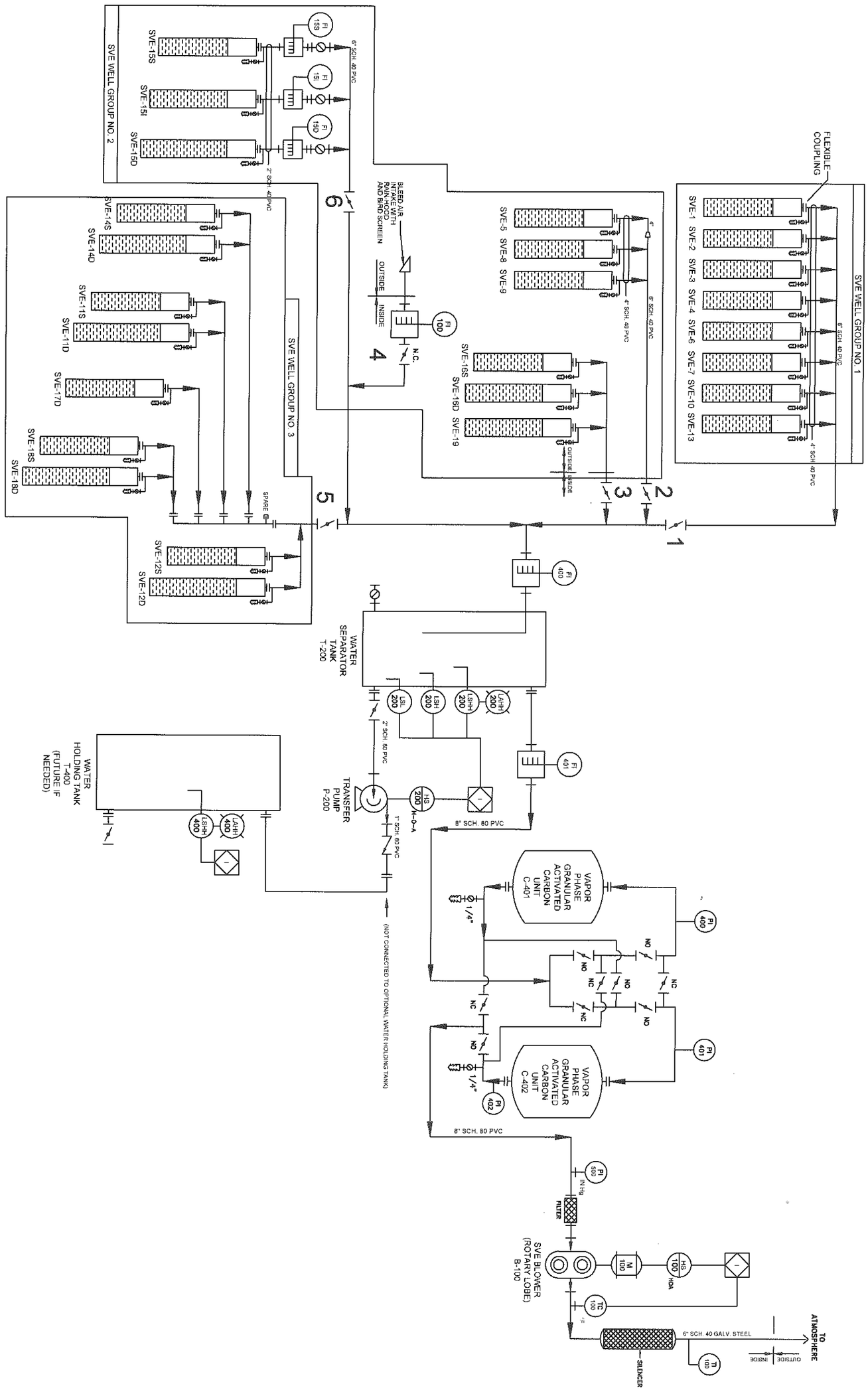
0 25 50 100 Feet

AECOM

Figure: 7

Soil Vapor Extraction (SVE) System Layout

Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2012-10-25



Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2012-10-22

Process and Instrumentation Diagram

AECOM

Figure: 8

Figure 9
MW-101 CVOC Concentration Trend

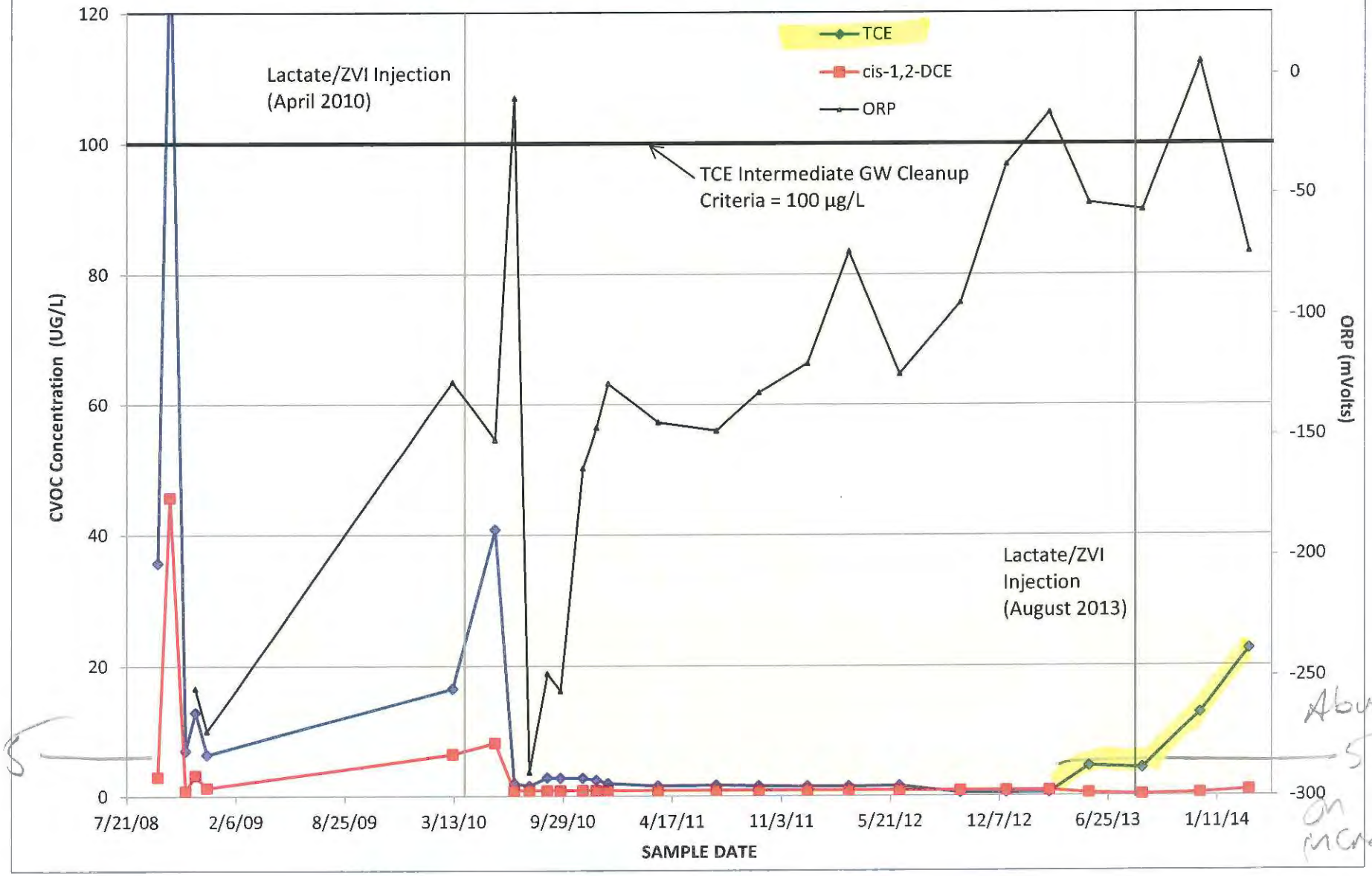


Figure 10
MW-102 CVOC Concentration Trend

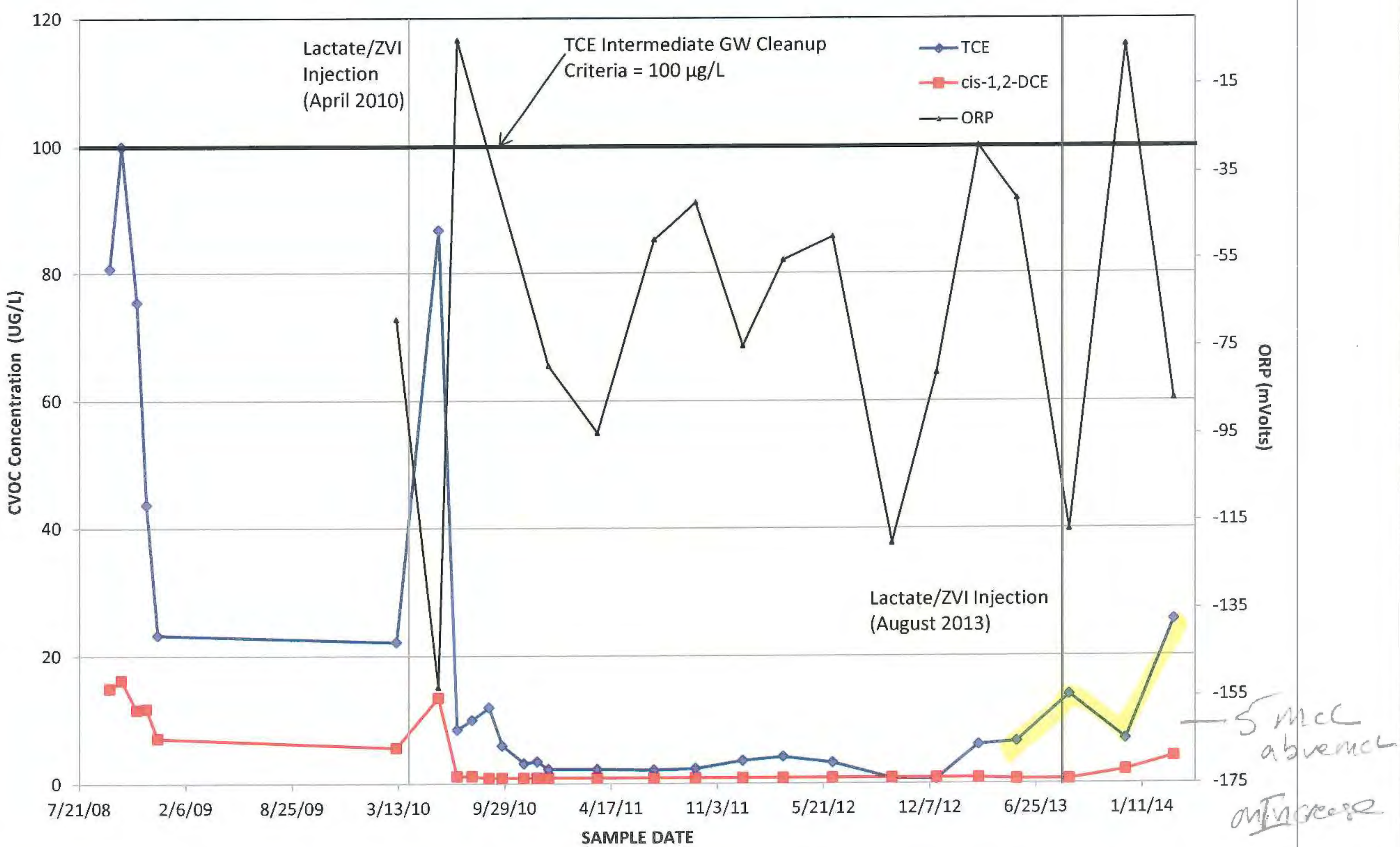
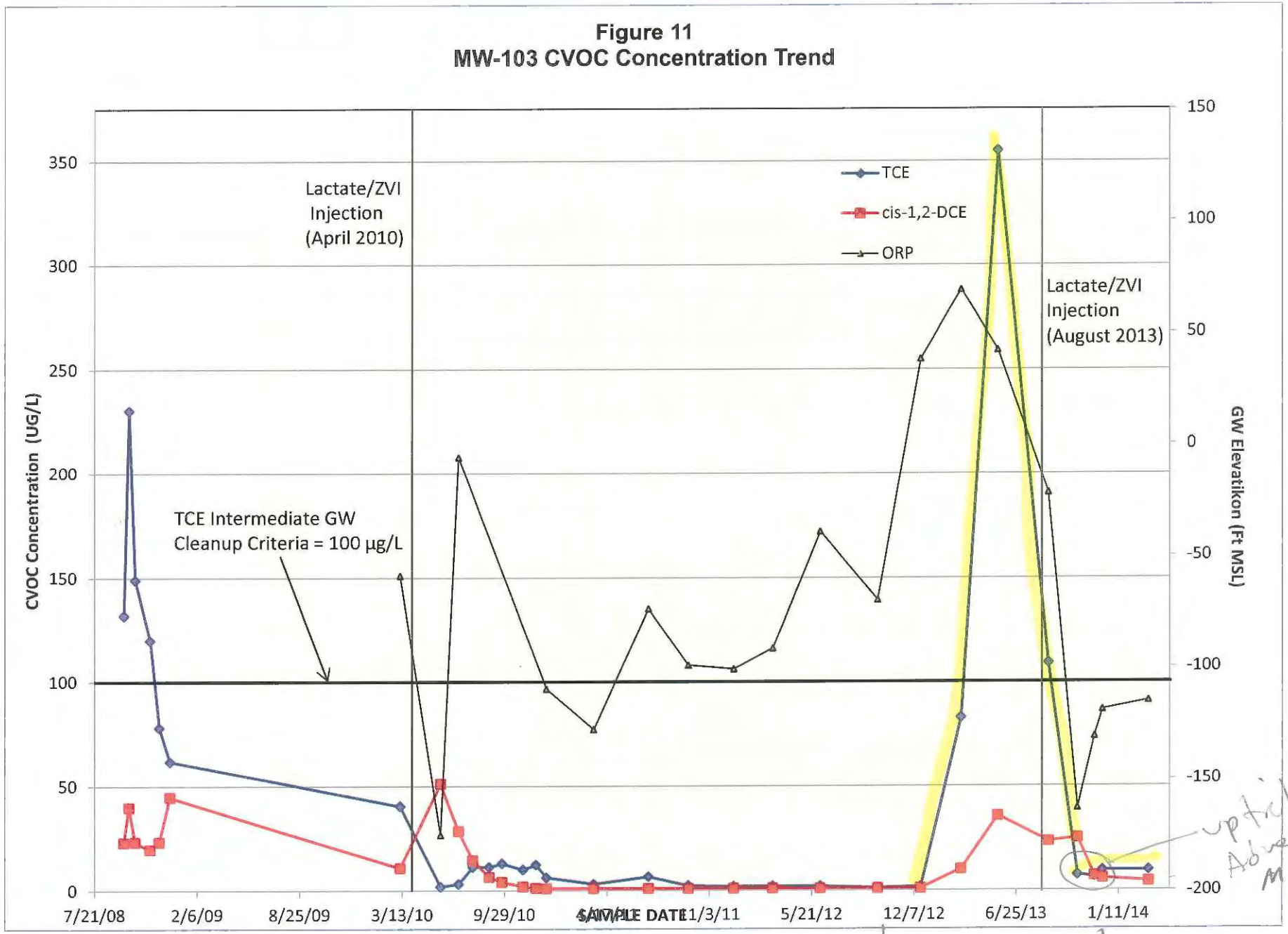


Figure 11
MW-103 CVOC Concentration Trend



uptick Above MCL

Spike? explanation

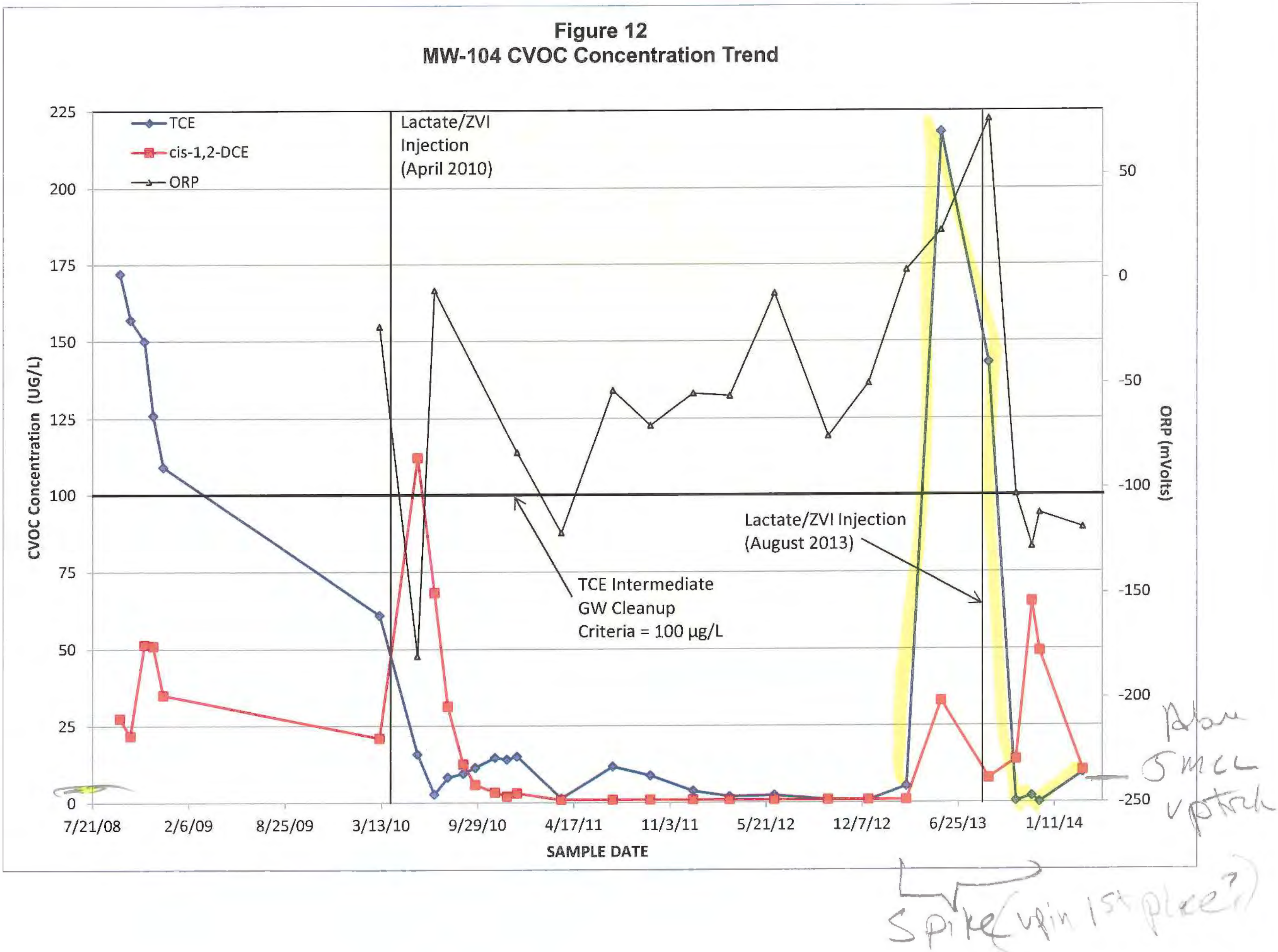


Figure 12
MW-104 CVOC Concentration Trend
TCE
cis-1,2-DCE
ORP
Lactate/ZVI Injection (April 2010)
Lactate/ZVI Injection (August 2013)
TCE Intermediate GW Cleanup Criteria = 100 µg/L
CVOC Concentration (UG/L)
ORP (mVolts)
SAMPLE DATE
225
200
175
150
125
100
75
50
25
0
50
0
-50
-100
-150
-200
-250
7/21/08
2/6/09
8/25/09
3/13/10
9/29/10
4/17/11
11/3/11
5/21/12
12/7/12
6/25/13
1/11/14

Figure 13
MW-105 CVOC Concentration Trend

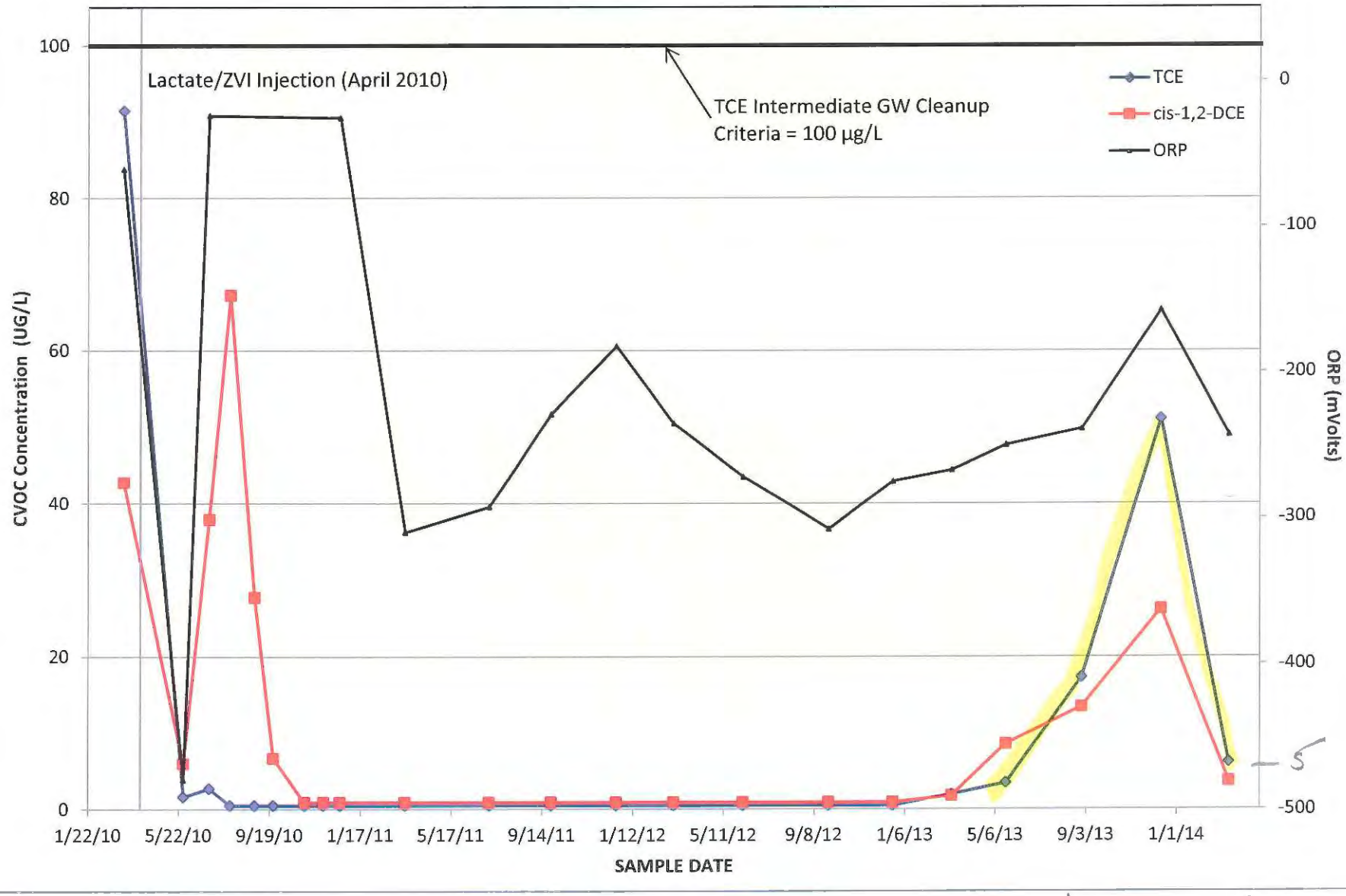


Figure 14
MW-106 CVOC Concentration Trend

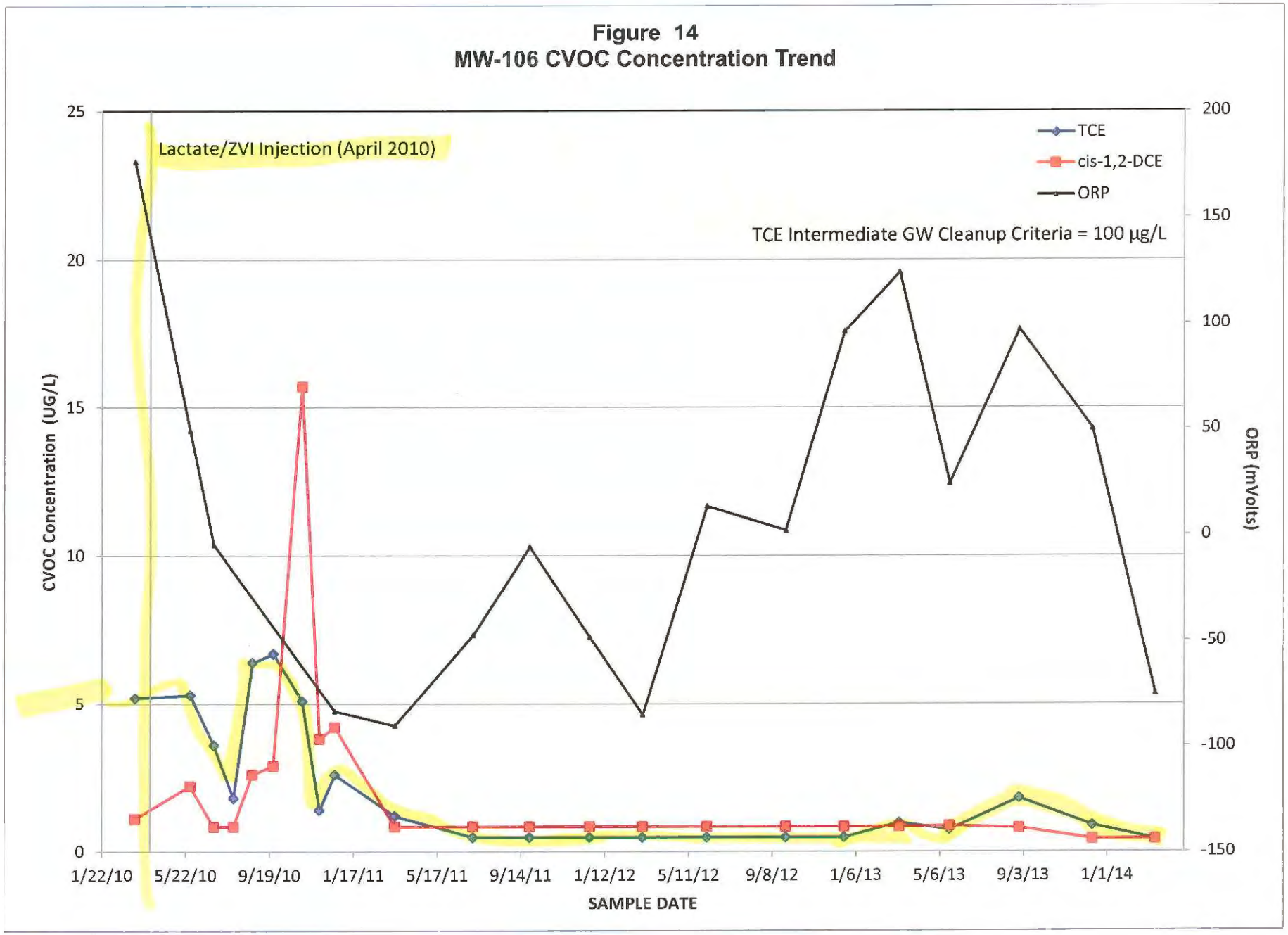
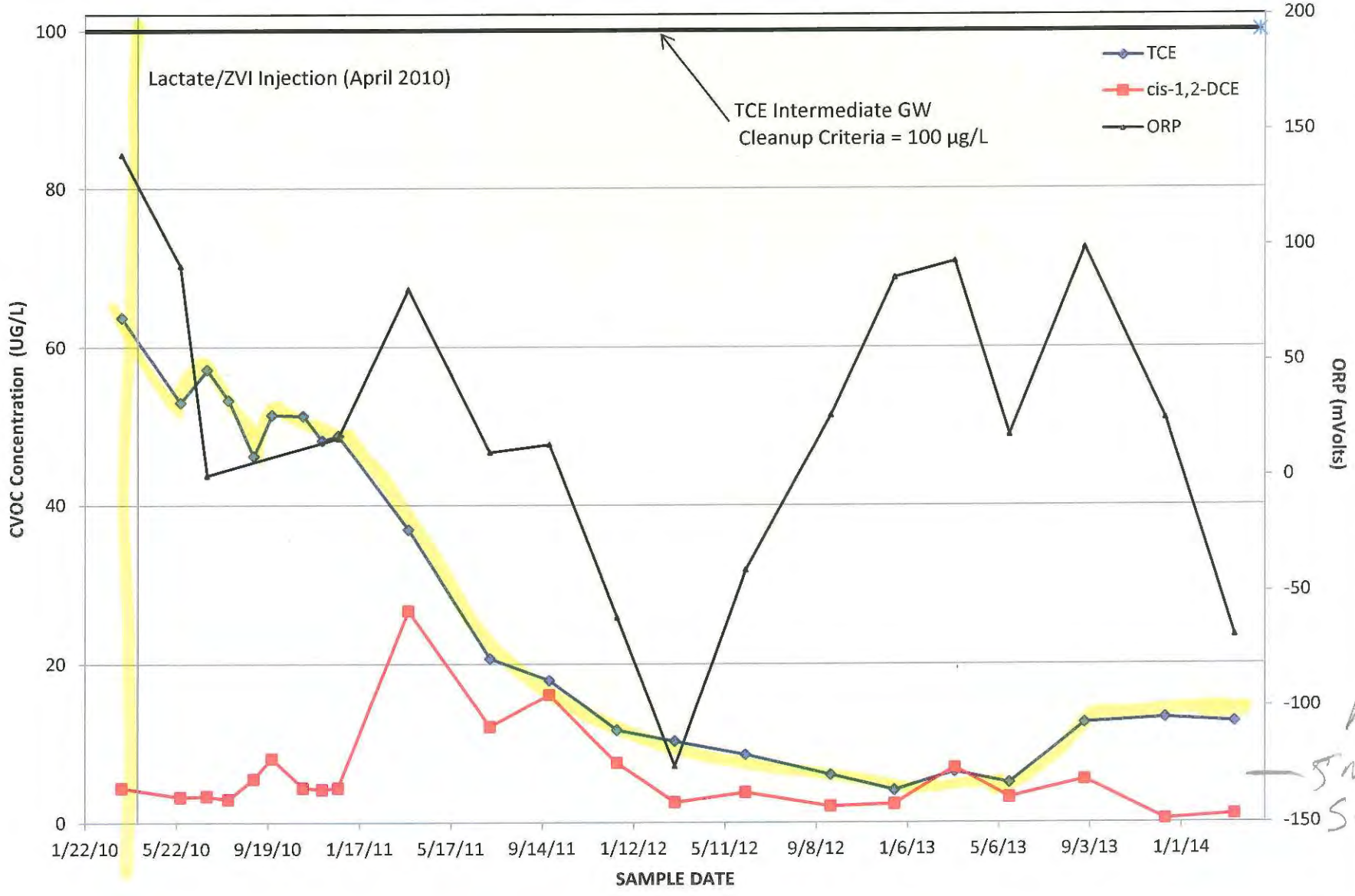
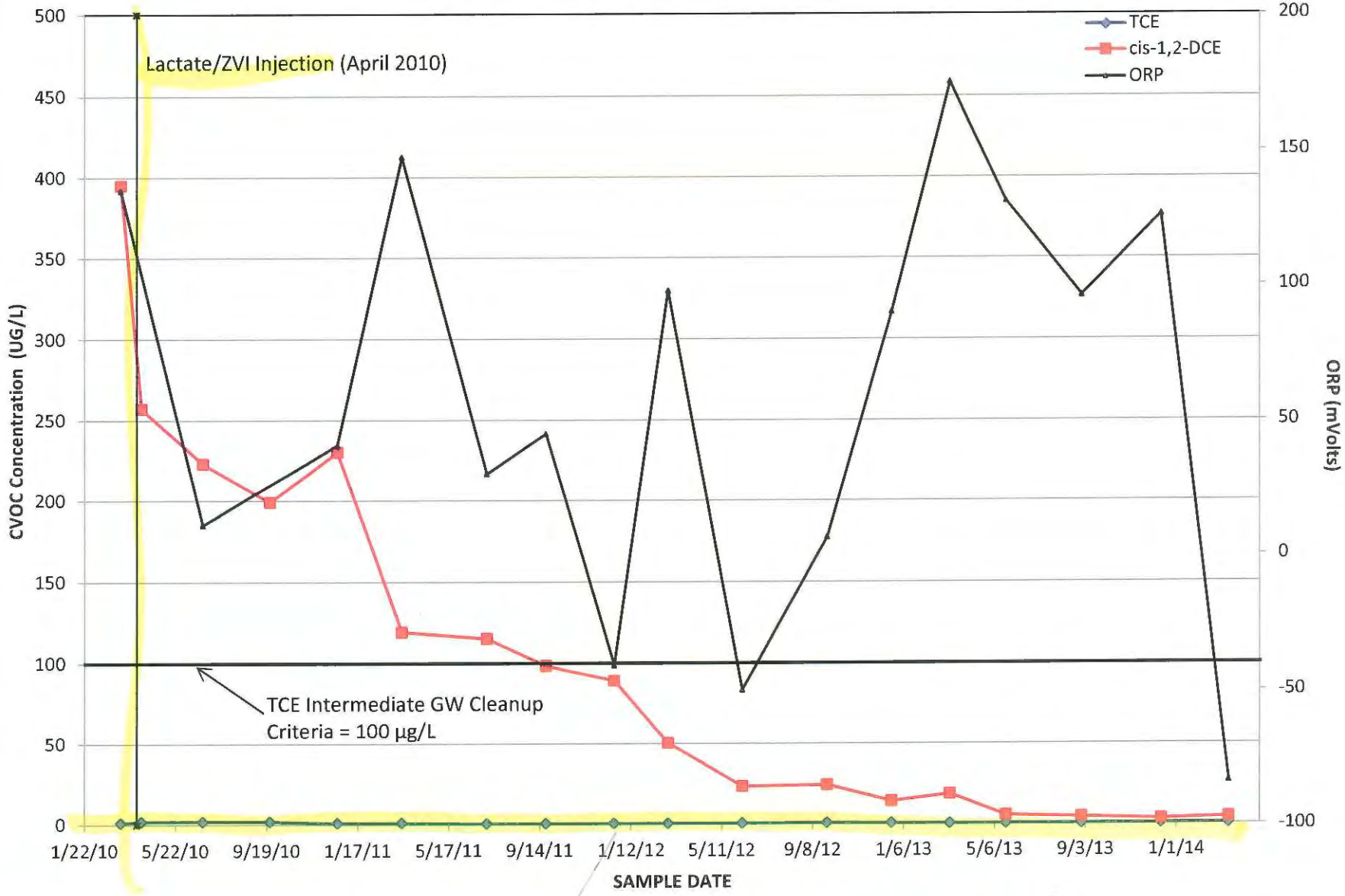


Figure 15
MW-107 CVOC Concentration



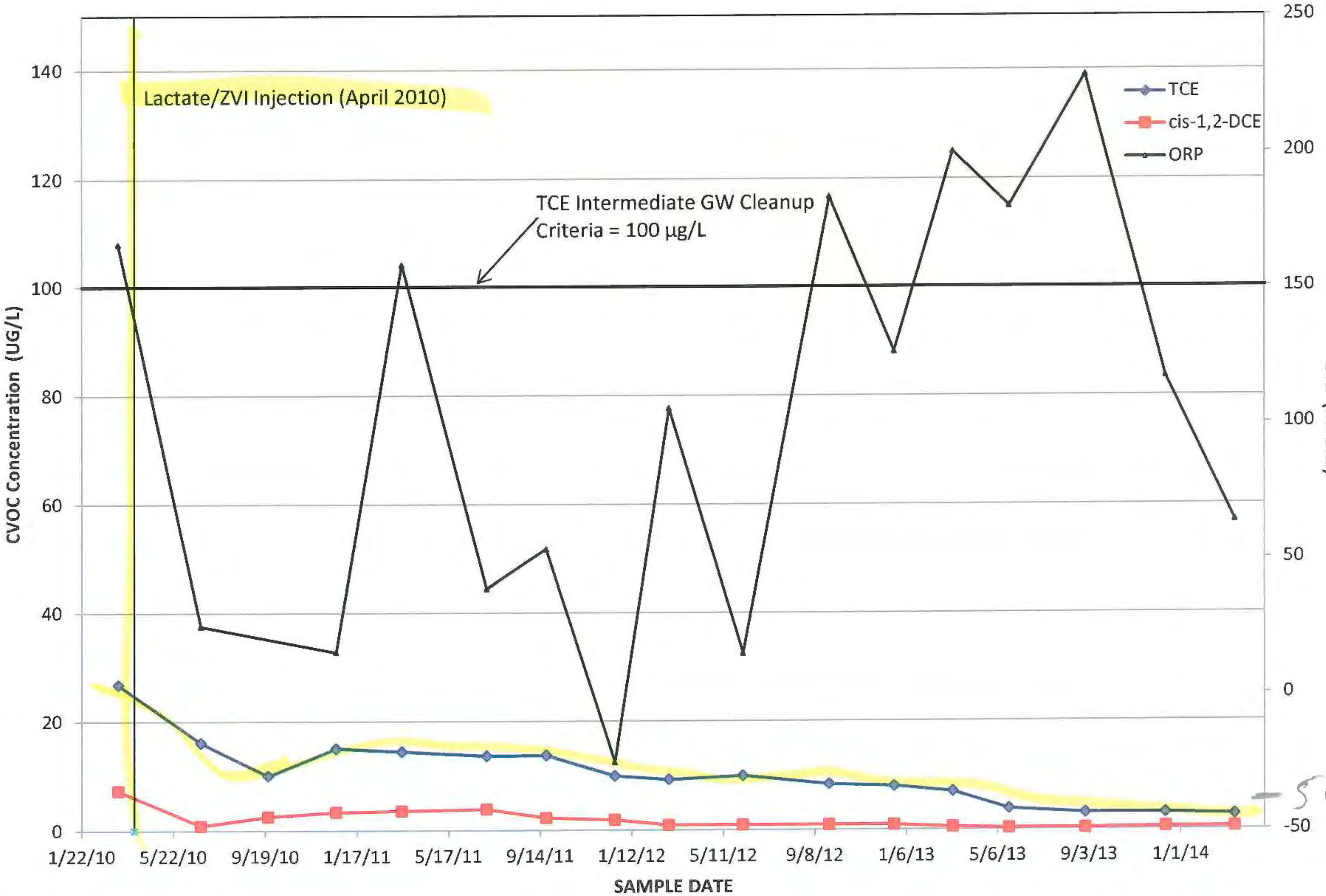
Above 5 MCL Stable?

Figure 16
LTMW-01 CVOC Concentration Trend



What are the numbers?

Figure 17
LTMW-02 CVOC Concentration Trend



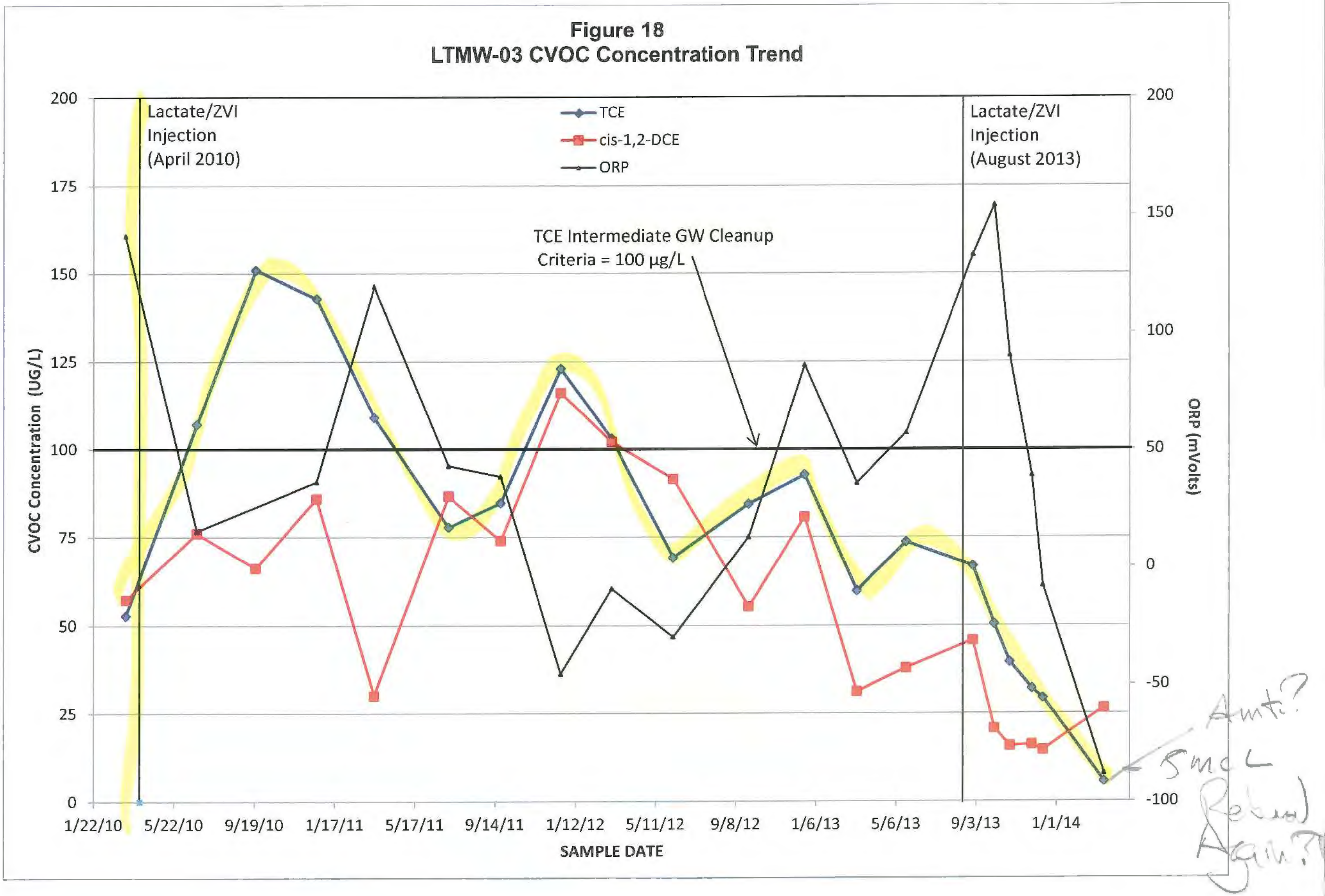
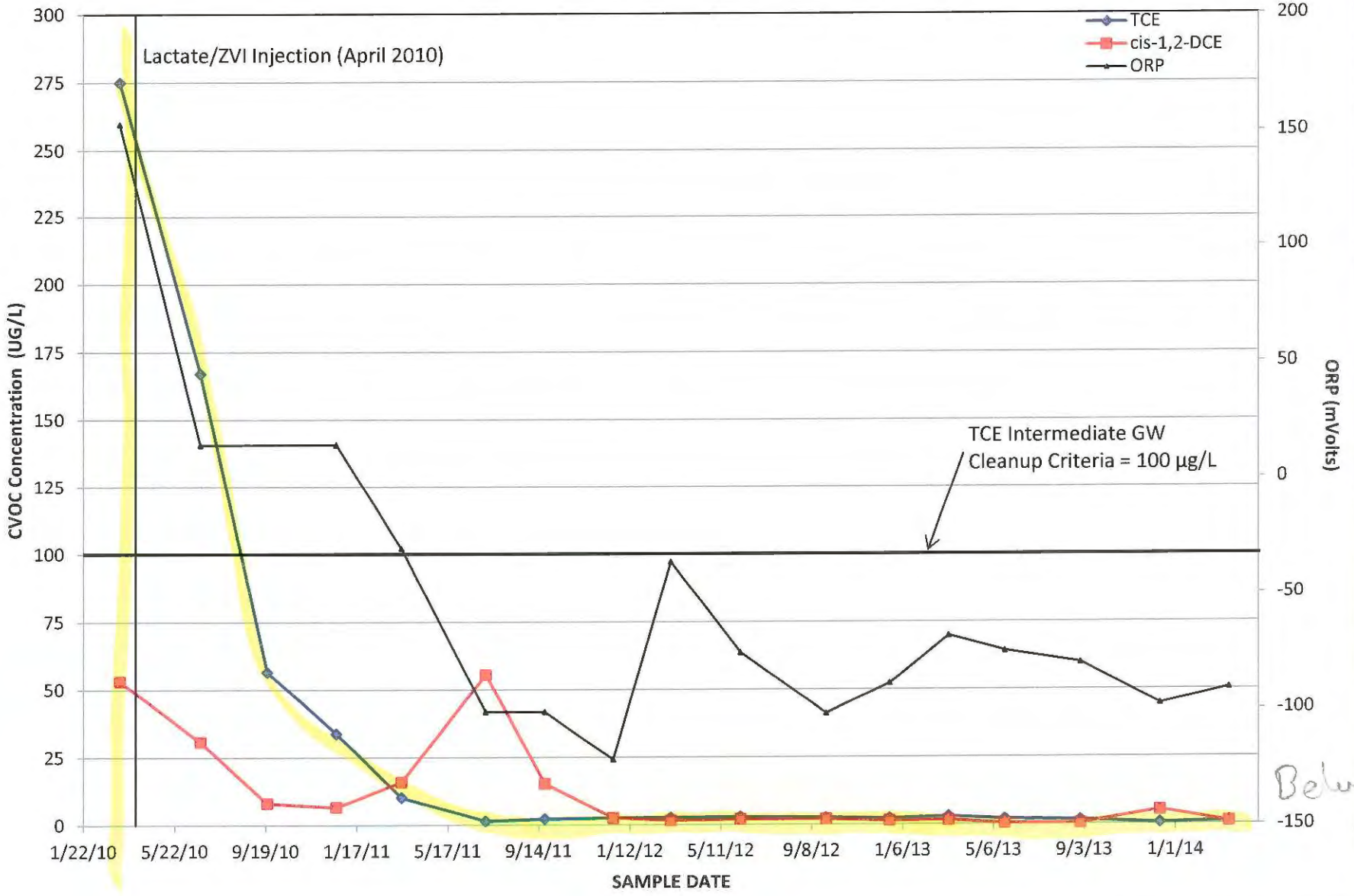


Figure 18
LTMW-03 CVOC Concentration Trend
Lactate/ZVI Injection (April 2010)
Lactate/ZVI Injection (August 2013)
TCE
cis-1,2-DCE
ORP
TCE Intermediate GW Cleanup Criteria = 100 µg/L
CVOC Concentration (UG/L)
ORP (mVolts)
SAMPLE DATE
200
175
150
125
100
75
50
25
0
150
-50
-100
1/22/10
5/22/10
9/19/10
1/17/11
5/17/11
9/14/11
1/12/12
5/11/12
9/8/12
1/6/13
5/6/13
9/3/13
1/1/14
Anti?
5MCL
Rebound
Again?

Figure 19
LTMW-03A Concentration Trend



Below MCL

Figure 20
Long Term TCE Concentration Trend at Hononegah Road

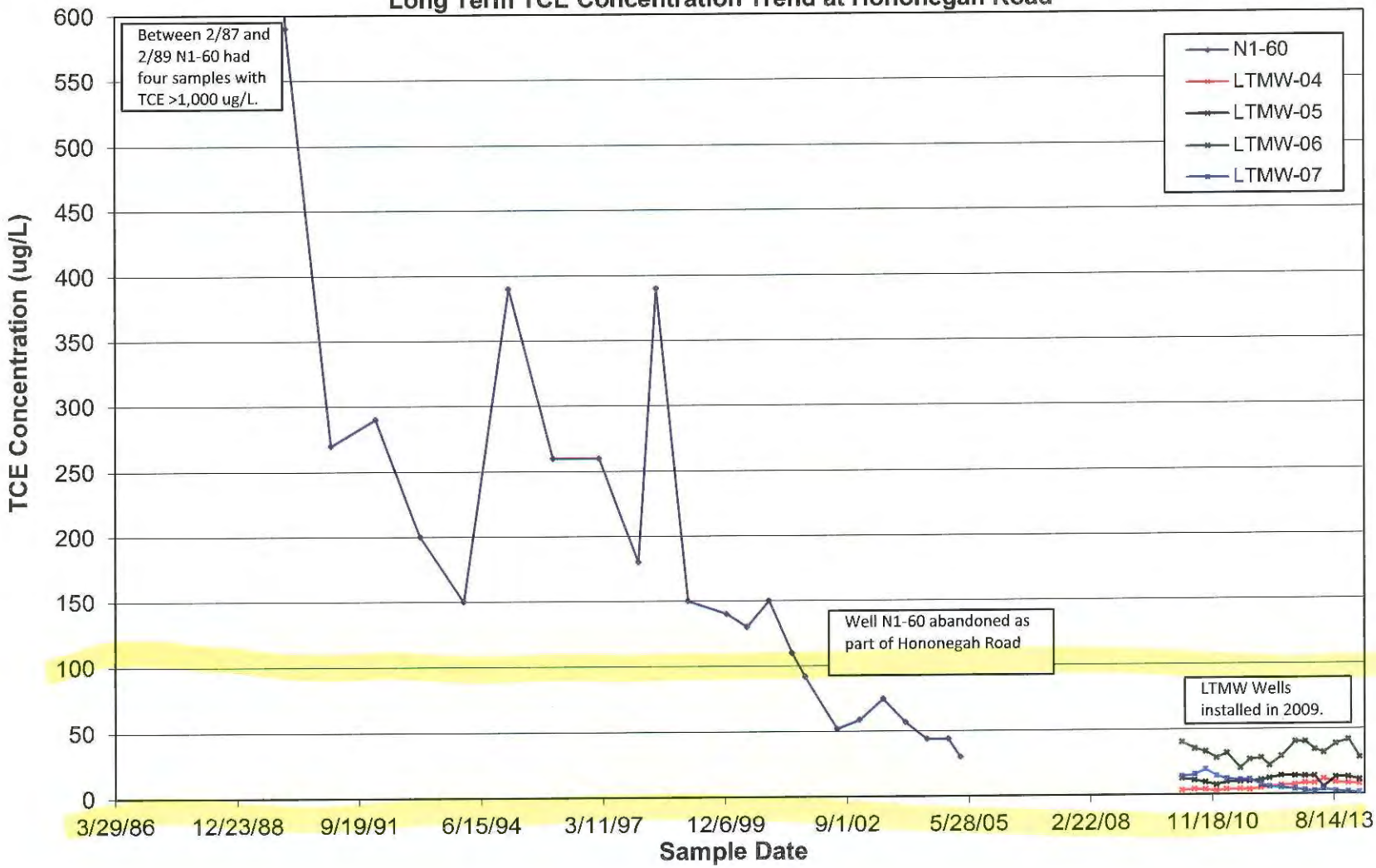
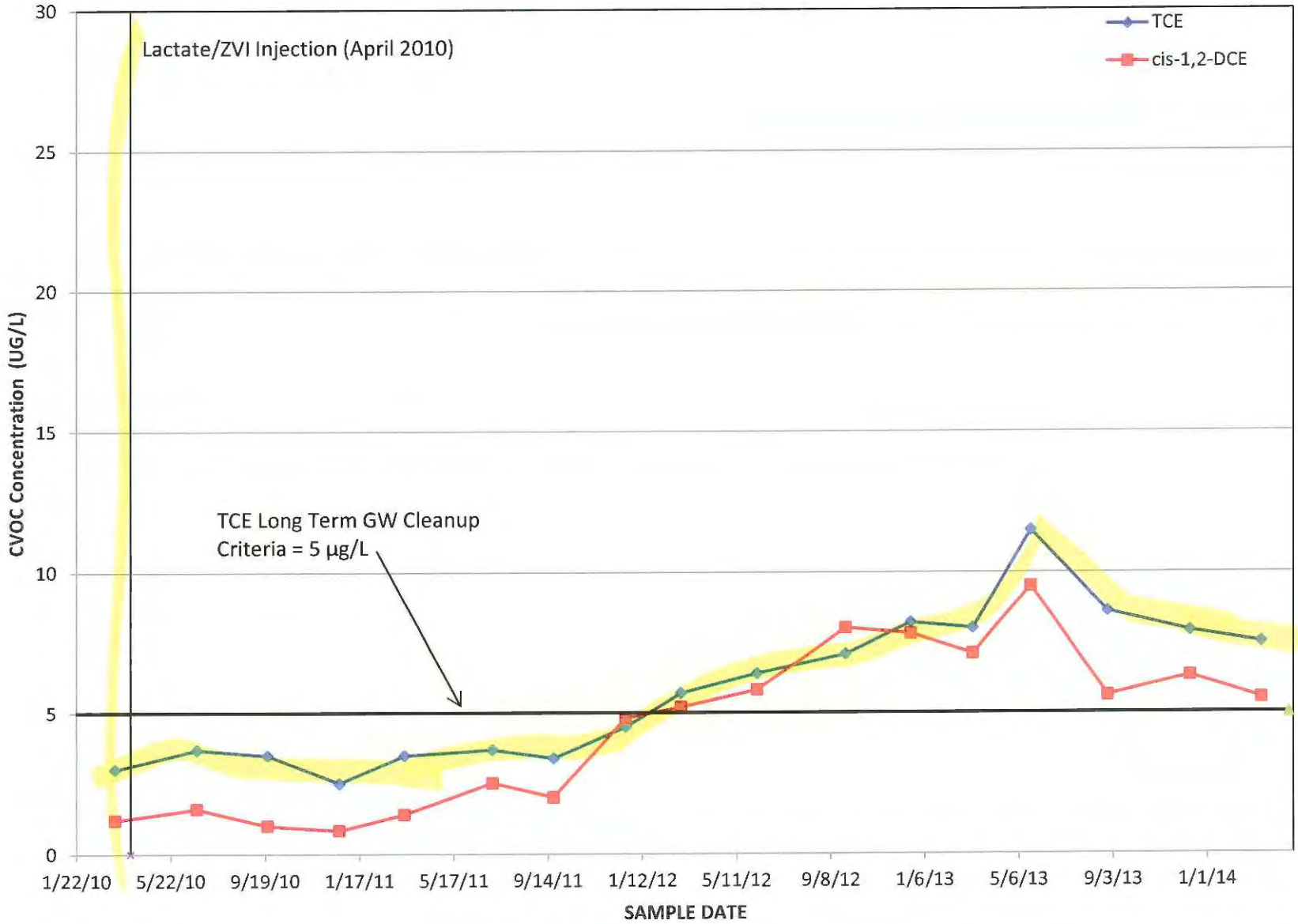


Figure 21
LTMW-04 CVOC Concentration Trend



Above MCL

Figure 22
LTMW-05 CVOC Concentration Trend

Above MCL

Figure 23
LTMW-06 CVOC Concentration Trend

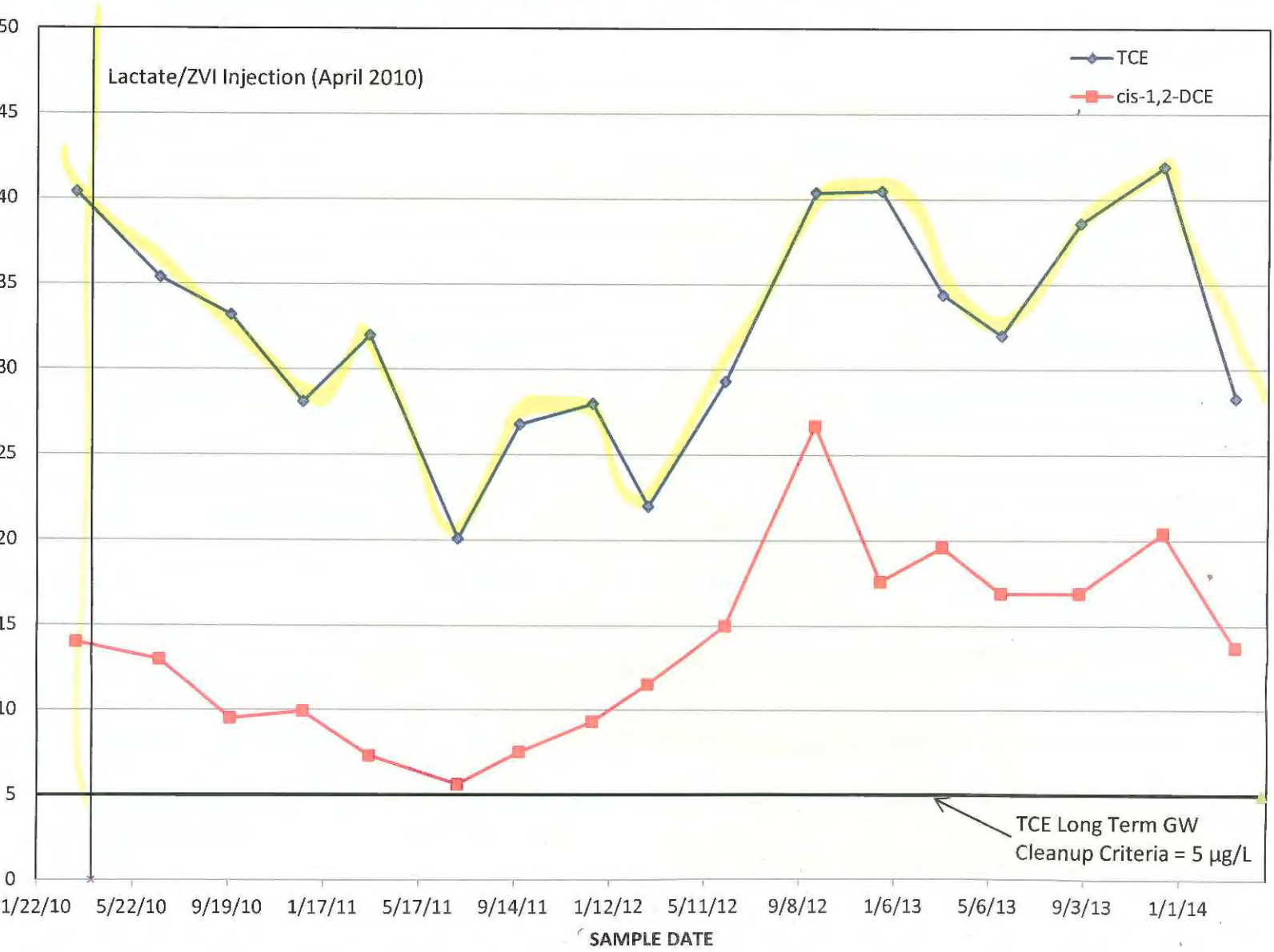
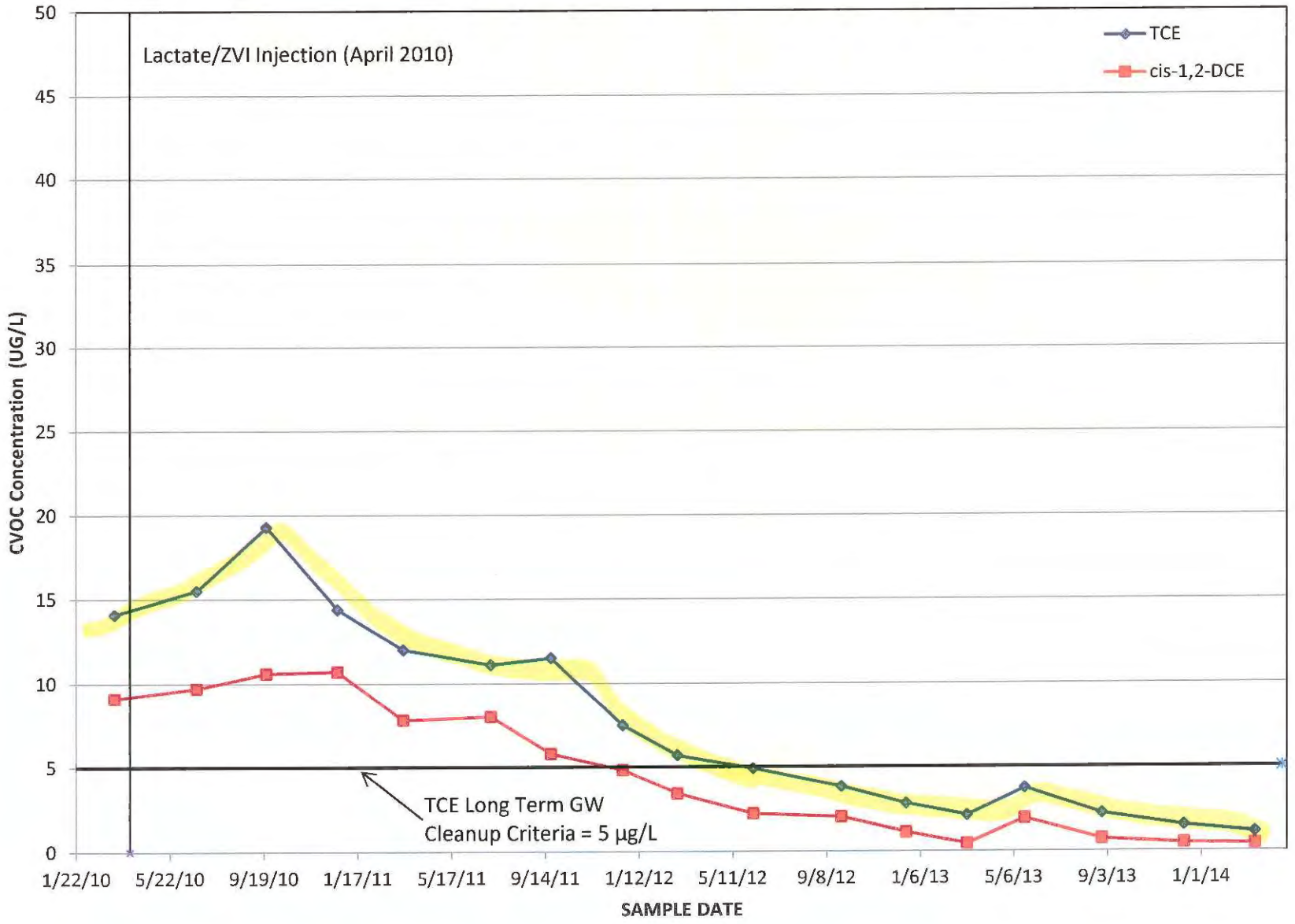
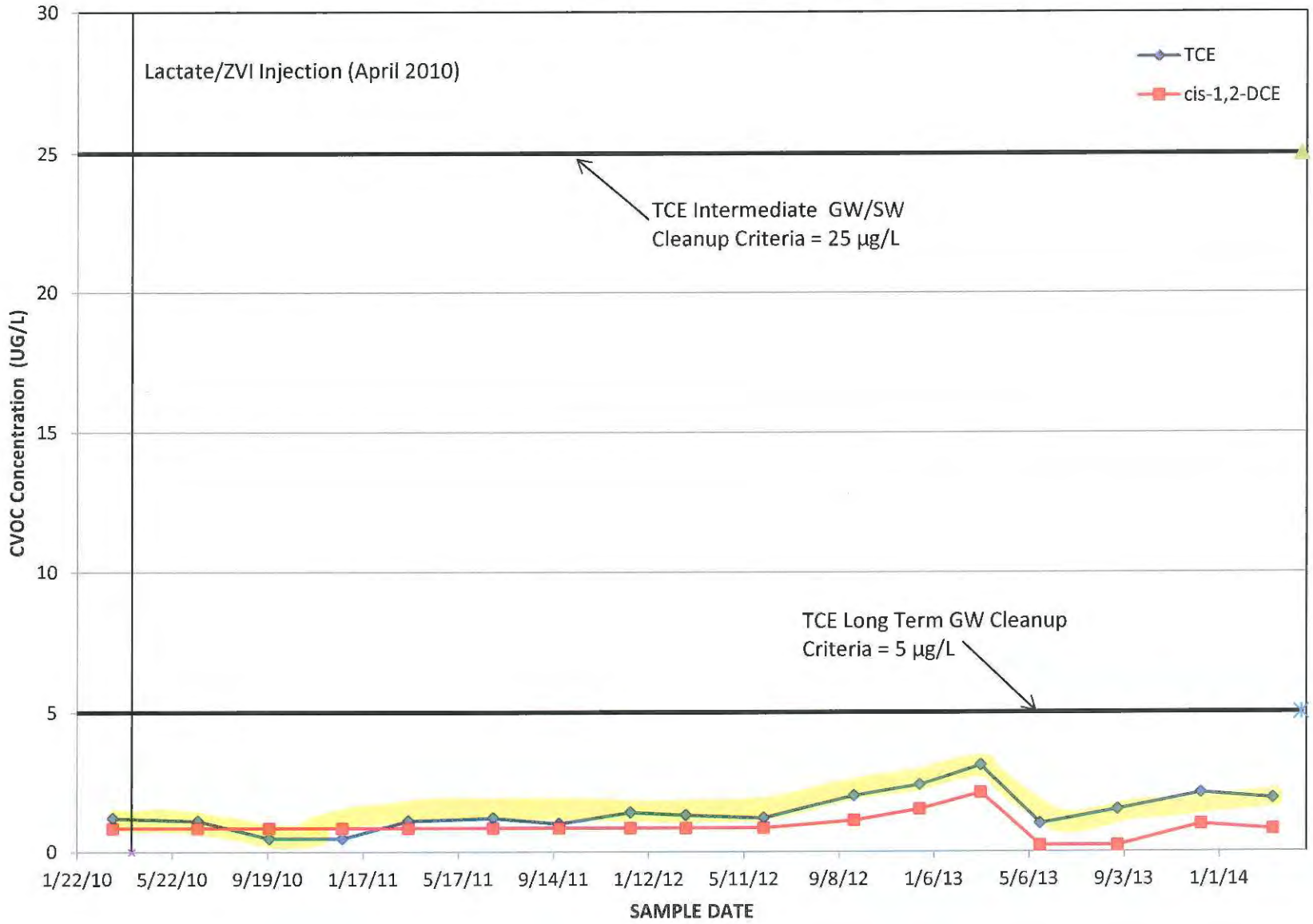


Figure 24
LTMW-07 CVOC Concentration Trend



Below MCL Trend Down

Figure 25
LTMW-08 CVOC Concentration Trend



Below MCL

Figure 26
LTMW-09 CVOC Concentration Trend

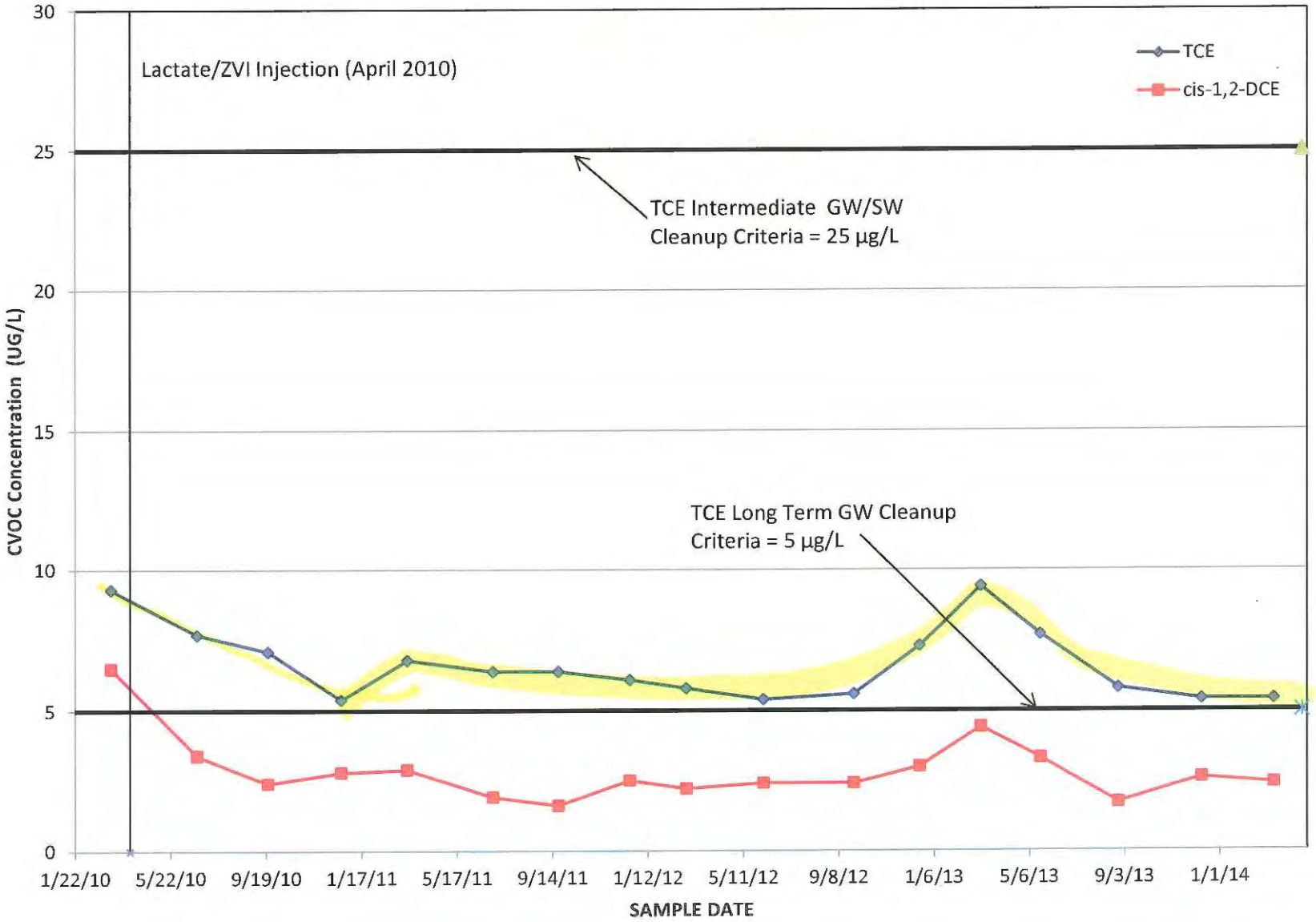
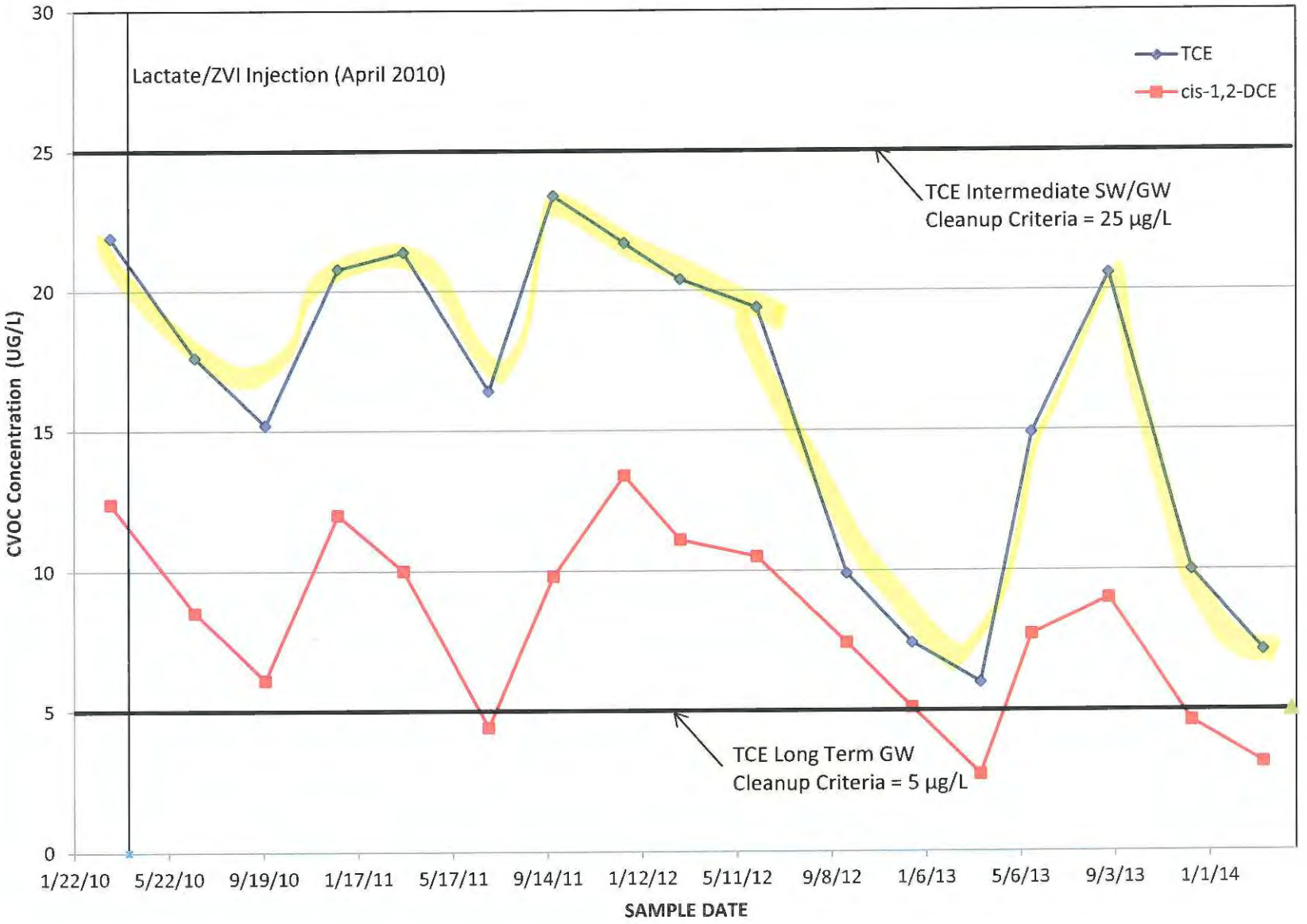
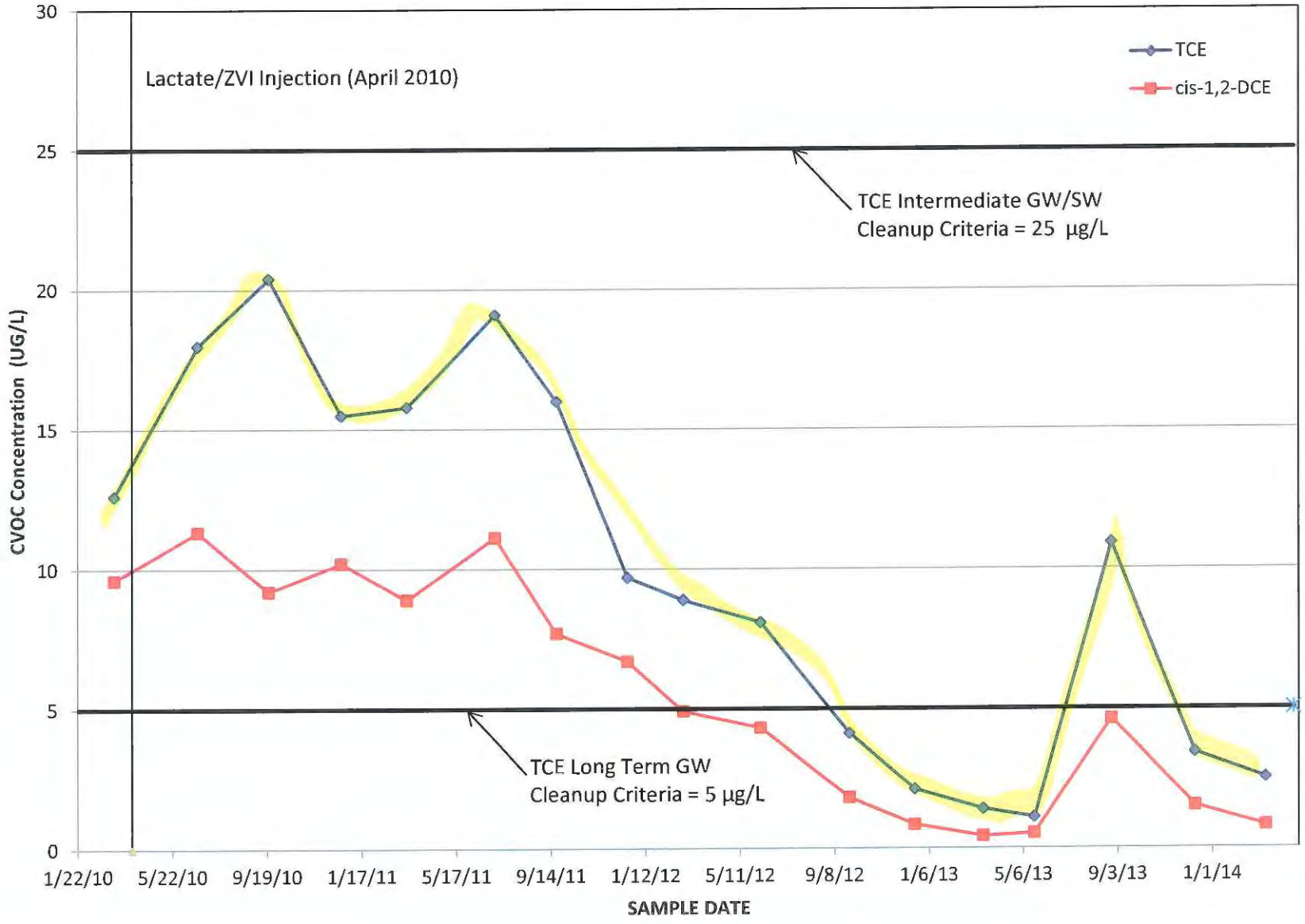


Figure 27
LTMW-10 CVOC Concentration Trend



Above MCL

Figure 28
LTMW-11 CVOC Concentration Trend



Below NC Recently

Appendix A

Soil Boring Logs and Well Construction Reports

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-01

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-01

STATE PLANE COORDINATE: X 2104622.0 Y 2607373.1 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/3/10 DATE FINISHED: 2/3/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY
(CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

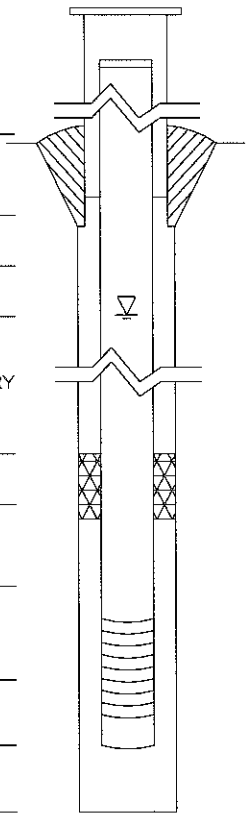
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____
(IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS)	(.01 ft)
752.89	-2.6	TOP OF PROTECTIVE CASING
752.79	-2.5	TOP OF RISER PIPE
750.33	0.00	GROUND SURFACE
749.33	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
749.33	1.0	TOP OF SEAL
721.33	29.0	TOP OF SANDPACK
718.33	32.0	TOP OF SCREEN
713.33	37.0	BOTTOM OF SCREEN
713.33	37.0	BOTTOM OF WELL
713.33	37.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS
(CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	50
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-02

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-02

STATE PLANE COORDINATE: X 2104543.8 Y 2607511.4 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/3/10 DATE FINISHED: 2/3/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips/Bentonite Slurry

INSTALLATION METHOD: Tremie Pumped

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY
(CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

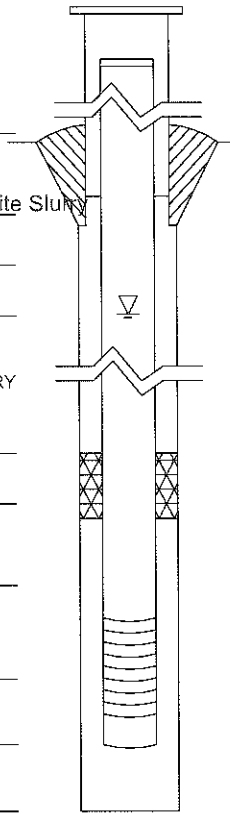
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____
(IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
752.61	-2.7	TOP OF PROTECTIVE CASING
752.48	-2.6	TOP OF RISER PIPE
749.92	0.00	GROUND SURFACE
748.92	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
748.92	1.0	TOP OF SEAL
716.92	33.0	TOP OF SANDPACK
714.92	35.0	TOP OF SCREEN
709.92	40.0	BOTTOM OF SCREEN
709.92	40.0	BOTTOM OF WELL
709.92	40.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS
(CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	35
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-03

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-03

STATE PLANE COORDINATE: X 2104403.6 Y 2607620.2 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

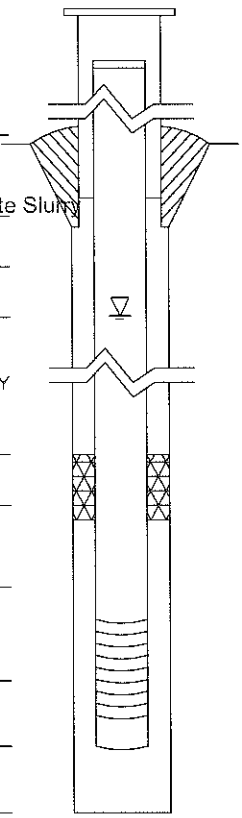
CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/3/10 DATE FINISHED: 2/3/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS



TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips/Bentonite Slurry

INSTALLATION METHOD: Tremie Pumped

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____

ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
752.42	-2.3	TOP OF PROTECTIVE CASING
752.19	-2.1	TOP OF RISER PIPE
750.08	0.00	GROUND SURFACE
749.08	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
749.08	1.0	TOP OF SEAL
727.58	22.5	TOP OF SANDPACK
725.08	25.0	TOP OF SCREEN
715.08	35.0	BOTTOM OF SCREEN
715.08	35.0	BOTTOM OF WELL
715.08	35.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	25
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-03A

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-03A

STATE PLANE COORDINATE: X 2104404.0 Y 2607627.1 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/3/10 DATE FINISHED: 2/3/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips/Bentonite Slurry

INSTALLATION METHOD: Tremie Pumped

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

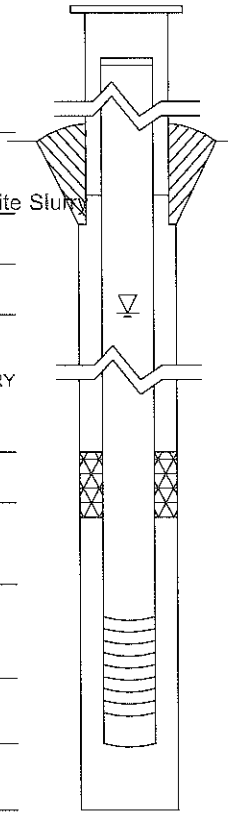
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
752.59	-2.6	TOP OF PROTECTIVE CASING
752.53	-2.5	TOP OF RISER PIPE
750.03	0.00	GROUND SURFACE
749.03	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
749.03	1.0	TOP OF SEAL
712.03	38.0	TOP OF SANDPACK
710.03	40.0	TOP OF SCREEN
705.03	45.0	BOTTOM OF SCREEN
705.03	45.0	BOTTOM OF WELL
705.03	45.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	40
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-04

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-04

STATE PLANE COORDINATE: X 2101512.9 Y 2606103.8 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/4/10 DATE FINISHED: 2/4/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips / Portland Cement Bentonite Slurry

INSTALLATION METHOD: Tremie Pumped

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY
(CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

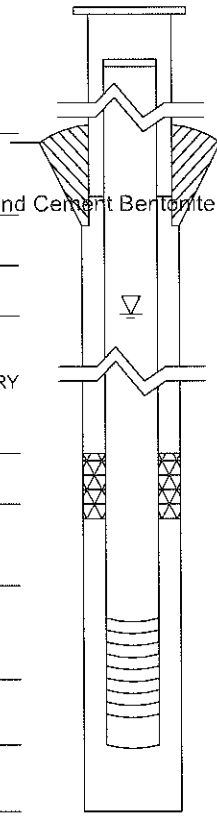
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____
(IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
748.50	0.5	TOP OF RISER PIPE
749.02	0.00	GROUND SURFACE
748.02	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
748.02	1.0	TOP OF SEAL
681.02	68.0	TOP OF SANDPACK
679.02	70.0	TOP OF SCREEN
674.02	75.0	BOTTOM OF SCREEN
674.02	75.0	BOTTOM OF WELL
674.02	75.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS
(CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	70
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-05

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-05

STATE PLANE COORDINATE: X 2101447.6 Y 2606181.4 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

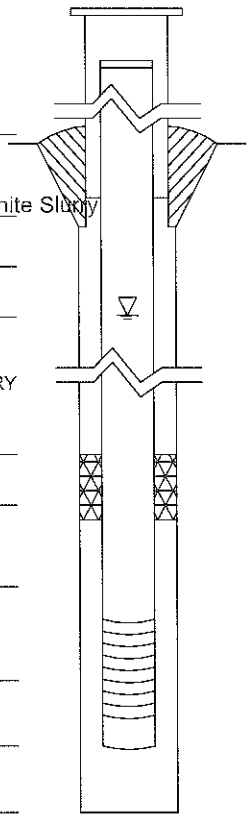
CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/4/10 DATE FINISHED: 2/4/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS



TYPE OF SURFACE SEAL: Bentonite

TYPE OF ANNULAR SEALANT: Portland Cement Bentonite Slurry

INSTALLATION METHOD: Tremie Pumped

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____

ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
749.35	0.3	TOP OF RISER PIPE
749.67	0.00	GROUND SURFACE
748.67	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
748.67	1.0	TOP OF SEAL
673.67	76.0	TOP OF SANDPACK
669.67	80.0	TOP OF SCREEN
664.67	85.0	BOTTOM OF SCREEN
664.67	85.0	BOTTOM OF WELL
664.67	85.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	80
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-06

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-06

STATE PLANE COORDINATE: X 2101393.0 Y 2606253.7 (or) LATITUDE ____° ____' ____" LONGITUDE ____° ____' ____"

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/4/10 DATE FINISHED: 2/5/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Portland Cement Bentonite Slurry

INSTALLATION METHOD: Tremie Pumped

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

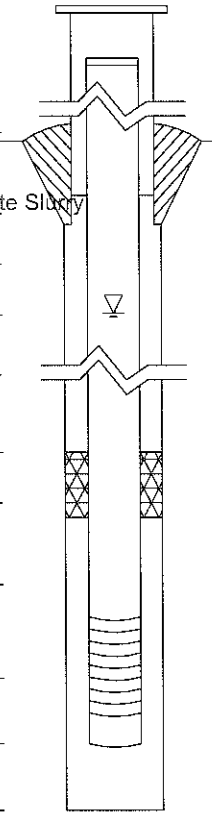
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
749.95	0.5	TOP OF RISER PIPE
750.45	0.00	GROUND SURFACE
749.45	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
749.45	1.0	TOP OF SEAL
690.45	60.0	TOP OF SANDPACK
686.95	63.5	TOP OF SCREEN
681.95	68.5	BOTTOM OF SCREEN
681.95	68.5	BOTTOM OF WELL
680.45	70.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	63.5
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-07

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-07

STATE PLANE COORDINATE: X 2101307.9 Y 2606351.8 (or) LATITUDE ____° ____' ____" LONGITUDE ____° ____' ____"

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 3/3/10 DATE FINISHED: 3/3/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Portland Cement Bentonite Slurry

INSTALLATION METHOD: Tremie Pumped

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

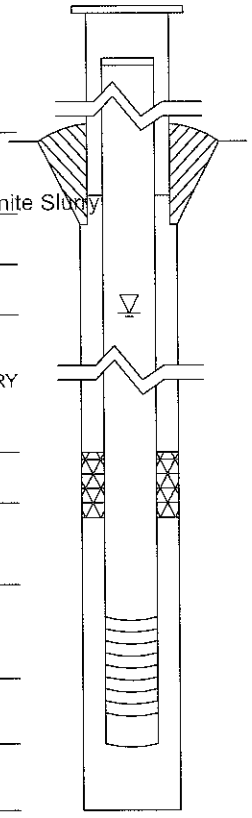
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
750.07	0.3	TOP OF RISER PIPE
750.37	0.00	GROUND SURFACE
749.37	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
749.37	1.0	TOP OF SEAL
684.37	66.0	TOP OF SANDPACK
680.37	70.0	TOP OF SCREEN
675.37	75.0	BOTTOM OF SCREEN
675.37	75.0	BOTTOM OF WELL
675.37	75.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	70
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-08

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-08

STATE PLANE COORDINATE: X 2099520.5 Y 2605553.9 (or) LATITUDE ____° ____' ____" LONGITUDE ____° ____' ____"

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/9/10 DATE FINISHED: 2/9/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

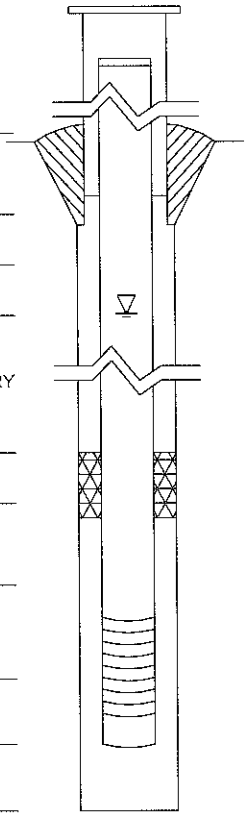
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
729.27	-2.7	TOP OF PROTECTIVE CASING
729.17	-2.6	TOP OF RISER PIPE
726.61	0.00	GROUND SURFACE
725.61	1.0	TOP OF ANNULAR SEALANT
		STATIC WATER LEVEL (AFTER COMPLETION)
725.61	1.0	TOP OF SEAL
658.61	68.0	TOP OF SANDPACK
656.61	70.0	TOP OF SCREEN
651.61	75.0	BOTTOM OF SCREEN
651.61	75.0	BOTTOM OF WELL
651.61	75.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	70
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-09

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-09

STATE PLANE COORDINATE: X 2099451.8 Y 2605768.9 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/9/10 DATE FINISHED: 2/10/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

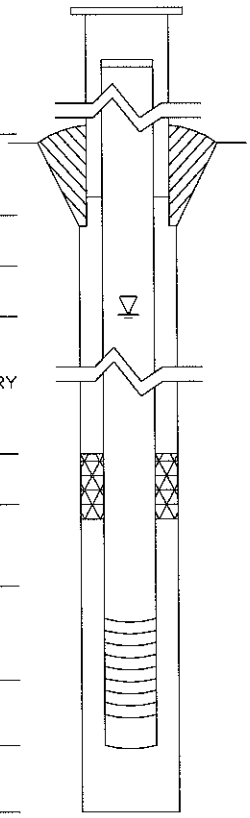
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
729.31	0.3	TOP OF RISER PIPE
729.65	0.00	GROUND SURFACE
728.65	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
728.65	1.0	TOP OF SEAL
681.65	48.0	TOP OF SANDPACK
679.65	50.0	TOP OF SCREEN
674.65	55.0	BOTTOM OF SCREEN
674.65	55.0	BOTTOM OF WELL
674.65	55.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	50
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-10

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-10

STATE PLANE COORDINATE: X 2099448.8 Y 2605913.9 (or) LATITUDE ____° ____' ____" LONGITUDE ____° ____' ____"

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/8/10 DATE FINISHED: 2/8/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

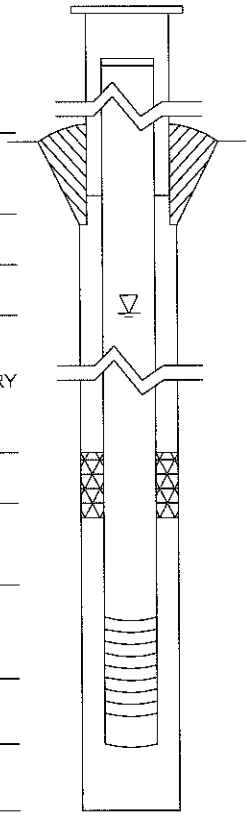
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
726.21	-0.3	TOP OF PROTECTIVE CASING
726.08	-0.2	TOP OF RISER PIPE
725.90	0.00	GROUND SURFACE
724.90	1.0	TOP OF ANNULAR SEALANT
		STATIC WATER LEVEL (AFTER COMPLETION)
724.90	1.0	TOP OF SEAL
678.90	47.0	TOP OF SANDPACK
675.90	50.0	TOP OF SCREEN
670.90	55.0	BOTTOM OF SCREEN
670.90	55.0	BOTTOM OF WELL
670.90	55.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	50
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.010

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: LTMW-11

SITE NAME: Former Warner Electric BOREHOLE #: LTMW-11

STATE PLANE COORDINATE: X 2099440.9 Y 2606005.1 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/8/10 DATE FINISHED: 2/8/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

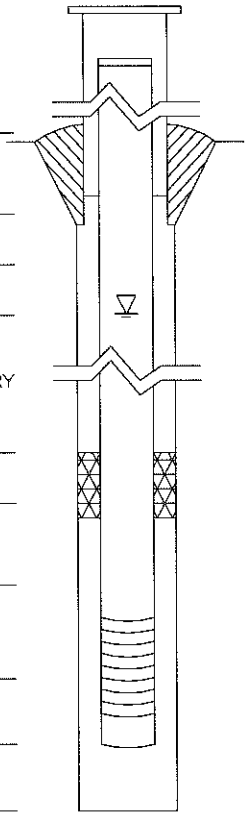
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
732.27	0.2	TOP OF RISER PIPE
732.45	0.00	GROUND SURFACE
731.45	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
731.45	1.0	TOP OF SEAL
654.45	78.0	TOP OF SANDPACK
657.45	75.0	TOP OF SCREEN
647.45	85.0	BOTTOM OF SCREEN
647.45	85.0	BOTTOM OF WELL
647.45	85.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	75
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	5
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.010

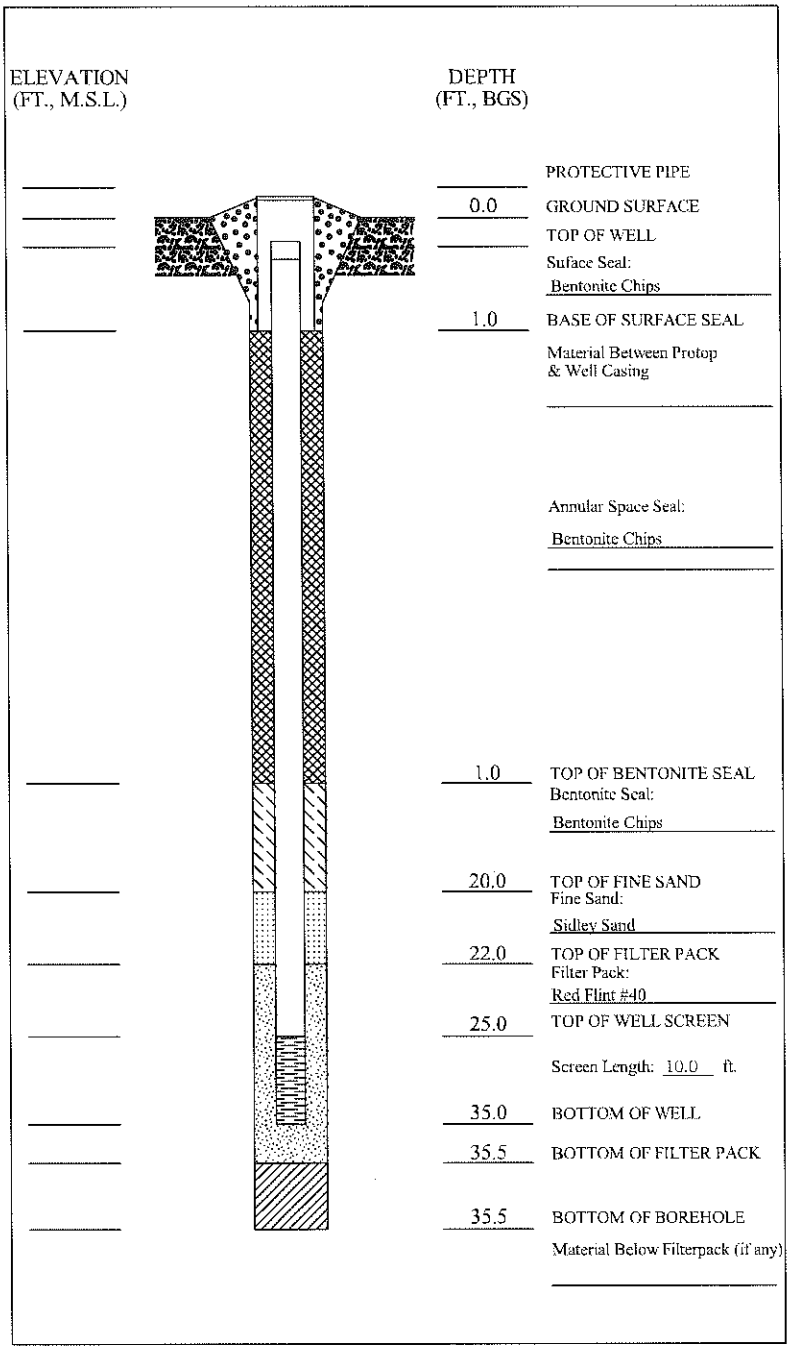
**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

RMT

WELL CONSTRUCTION DIAGRAM

PROJECT:	Former Warner Electric					WELL NUMBER:	MW-101
PROJ. NO:	2541.27	DATE INSTALLED:	9/15/2008	INST. BY:	On-Site Environmental	OBSV. BY:	Ted O'Connell
NW 1/4 of NW 1/4 of Sec. 28, T. 46 N, R. 12 ☒ E ☐ W				State Plane COORDINATES:	_____ ft. N, _____ ft. E.		



1. CASING AND SCREEN DETAILS:

Protective Cover with Lock? Yes Key No: _____

Protective Cover Description: _____

Riser Pipe (Material & Schedule): Schedule 40 PVC

Well Casing Diameter (in): 2 I.D. 2.125 O.D.

Screen Type: Factory Slotted PVC

Slot Size (in): 0.010 Pipe Joints: Threaded

Borehole Diameter (in): 6 From 0 ft. To 35 ft.

_____ From ____ ft. To ____ ft.

Comments: _____

2. WELL DEVELOPMENT:

Development Method: Proactive Purge Pump

Time Spent Developing (min): 35

Water: Removed: 35 Gallons

Added: 0 Gallons

Water Clarity Before/After Development:

Before: Slightly Turbid - light brown

After: Clear - no turbidity

Water Level Information:

Before Development:

Measurement Date/Time: 9/16/2008 8:40:00 AM

Depth to Water: 25.59 ft. Depth to Bottom: 34.95 ft.

After Development:

Measurement Date/Time: 9/16/2008 9:40:00 AM

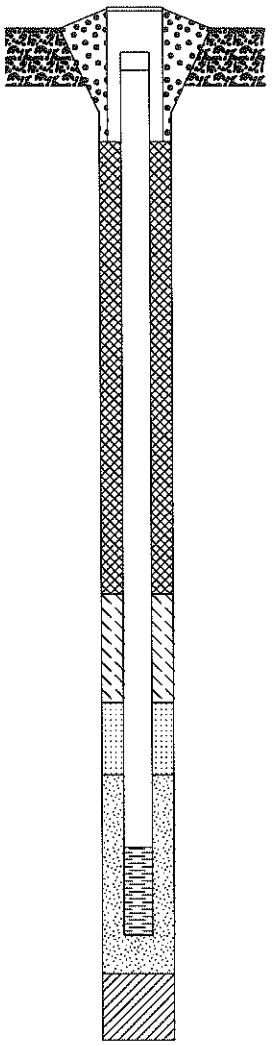
Depth to Water: 25.40 ft. Depth to Bottom: 34.95 ft.

Comments: _____

RMT

WELL CONSTRUCTION DIAGRAM

PROJECT:	Former Warner Electric					WELL NUMBER:	MW-102
PROJ. NO:	2541.27	DATE INSTALLED:	9/15/2008	INST. BY:	On-Site Environmental	OBSV. BY:	Ted O'Connell
NW 1/4 of NW 1/4 of Sec. 28, T. 46 N, R. 12 ☒ E ☐ W				State Plane COORDINATES:	_____ ft. N, _____ ft. E.		



ELEVATION (FT., M.S.L.)	DEPTH (FT., BGS)	
		PROTECTIVE PIPE
	0.0	GROUND SURFACE
		TOP OF WELL
		Suface Seal: Bentonite Chips
	1.0	BASE OF SURFACE SEAL
		Material Between Protop & Well Casing
		Annular Space Seal: Bentonite Chips
	1.0	TOP OF BENTONITE SEAL
		Bentonite Seal: Bentonite Chips
	20.0	TOP OF FINE SAND
		Fine Sand: Sidley Sand
	22.0	TOP OF FILTER PACK
		Filter Pack: Red Flint #40
	25.0	TOP OF WELL SCREEN
		Screen Length: 10.0 ft.
	35.0	BOTTOM OF WELL
	35.5	BOTTOM OF FILTER PACK
	35.5	BOTTOM OF BOREHOLE
		Material Below Filterpack (if any)

1. CASING AND SCREEN DETAILS:

Protective Cover with Lock? Yes Key No: _____

Protective Cover Description: _____

Riser Pipe (Material & Schedule): Schedule 40 PVC

Well Casing Diameter (in): 2 I.D. 2.125 O.D.

Screen Type: Factory Slotted PVC

Slot Size (in): 0.010 Pipe Joints: Threaded

Borehole Diameter (in): 6 From 0 ft. To 35 ft.

_____ From _____ ft. To _____ ft.

Comments: _____

2. WELL DEVELOPMENT:

Development Method: Proactive Purge Pump

Time Spent Developing (min): 25

Water: Removed: 25 Gallons
Added: 0 Gallons

Water Clarity Before/After Development:

Before: Slightly Turbid - light brown

After: Clear - no turbidity

Water Level Information:

Before Development:

Measurement Date/Time: 9/16/2008 10:41:00 AM

Depth to Water: 25.40 ft. Depth to Bottom: 35.00 ft.

After Development:

Measurement Date/Time: 9/16/2008 11:06:00 AM

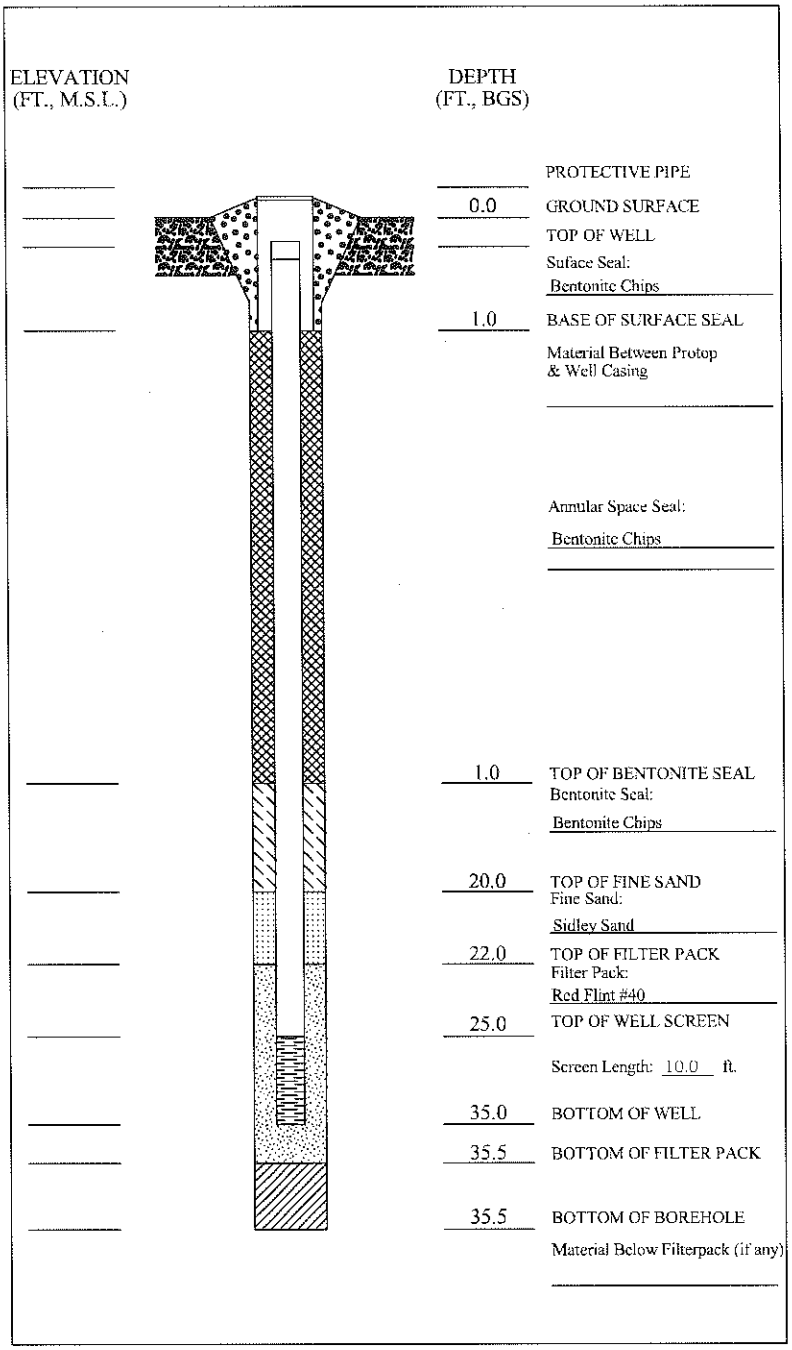
Depth to Water: 25.32 ft. Depth to Bottom: 35.00 ft.

Comments: _____

RMT

WELL CONSTRUCTION DIAGRAM

PROJECT:	Former Warner Electric					WELL NUMBER:	MW-103
PROJ. NO:	2541.27	DATE INSTALLED:	9/15/2008	INST. BY:	On-Site Environmental	OBSV. BY:	Ted O'Connell
NW 1/4 of NW 1/4 of Sec. 28, T. 46 N, R. 12 ☒ E ☐ W				State Plane COORDINATES:	_____ ft. N, _____ ft. E.		



1. CASING AND SCREEN DETAILS:

Protective Cover with Lock? Yes Key No: _____

Protective Cover Description: _____

Riser Pipe (Material & Schedule): Schedule 40 PVC

Well Casing Diameter (in): 2 I.D. 2.125 O.D.

Screen Type: Factory Slotted PVC

Slot Size (in): 0.010 Pipe Joints: Threaded

Borehole Diameter (in): 6 From 0 ft. To 35 ft.

_____ From _____ ft. To _____ ft.

Comments: _____

2. WELL DEVELOPMENT:

Development Method: Proactive Purge Pump

Time Spent Developing (min): 27

Water: Removed: 22 Gallons
Added: 0 Gallons

Water Clarity Before/After Development:

Before: Moderate Turbidity - Red Brown

After: Clear - no turbidity

Water Level Information:

Before Development:

Measurement Date/Time: 9/16/2008 12:37:00 PM

Depth to Water: 25.40 ft. Depth to Bottom: 34.80 ft.

After Development:

Measurement Date/Time: 9/16/2008 1:04:00 PM

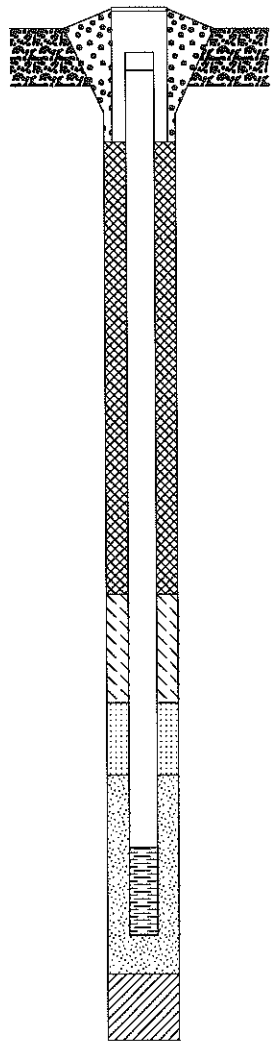
Depth to Water: 25.40 ft. Depth to Bottom: 34.80 ft.

Comments: _____

RMT

WELL CONSTRUCTION DIAGRAM

PROJECT:	Former Warner Electric					WELL NUMBER:	MW-104
PROJ. NO:	2541.27	DATE INSTALLED:	9/15/2008	INST. BY:	On-Site Environmental	OBSV. BY:	Ted O'Connell
NW 1/4 of NW 1/4 of Sec. 28, T. 46 N, R. 12 ☒ E ☐ W				State Plane COORDINATES:	_____ ft. N, _____ ft. E.		



ELEVATION (FT., M.S.L.) | DEPTH (FT., BGS)

DEPTH (FT., BGS)	
	PROTECTIVE PIPE
0.0	GROUND SURFACE
	TOP OF WELL
	Suface Seal: Bentonite Chips
1.0	BASE OF SURFACE SEAL
	Material Between Protop & Well Casing
	Annular Space Seal: Bentonite Chips
1.0	TOP OF BENTONITE SEAL Bentonite Seal: Bentonite Chips
20.0	TOP OF FINE SAND Fine Sand: Sidley Sand
22.0	TOP OF FILTER PACK Filter Pack: Red Flint #40
25.0	TOP OF WELL SCREEN
	Screen Length: 10.0 ft.
35.0	BOTTOM OF WELL
35.5	BOTTOM OF FILTER PACK
35.5	BOTTOM OF BOREHOLE
	Material Below Filterpack (if any)

1. CASING AND SCREEN DETAILS:

Protective Cover with Lock? Yes Key No: _____

Protective Cover Description: _____

Riser Pipe (Material & Schedule): Schedule 40 PVC

Well Casing Diameter (in): 2 I.D. 2.125 O.D.

Screen Type: Factory Slotted PVC

Slot Size (in): 0.010 Pipe Joints: Threaded

Borehole Diameter (in): 6 From 0 ft. To 35 ft.

_____ From _____ ft. To _____ ft.

Comments: _____

2. WELL DEVELOPMENT:

Development Method: Proactive Purge Pump

Time Spent Developing (min): 22

Water: Removed: 22 Gallons
Added: 0 Gallons

Water Clarity Before/After Development:

Before: Moderate Turbidity - Red Brown

After: Clear - no turbidity

Water Level Information:

Before Development:

Measurement Date/Time: 9/16/2008 1:21:00 PM

Depth to Water: 25.47 ft. Depth to Bottom: 34.95 ft.

After Development:

Measurement Date/Time: 9/16/2008 1:43:00 PM

Depth to Water: 25.47 ft. Depth to Bottom: 34.95 ft.

Comments: _____

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: MW-105

SITE NAME: Former Warner Electric BOREHOLE #: MW-105

STATE PLANE COORDINATE: X 2104858.0 Y 2607845.4 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/2/10 DATE FINISHED: 2/2/10

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

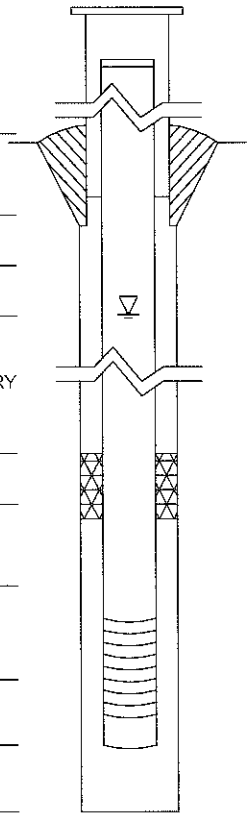
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
751.42	-0.2	TOP OF RISER PIPE
751.19	0.00	GROUND SURFACE
750.19	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
750.19	1.0	TOP OF SEAL
728.19	23.0	TOP OF SANDPACK
726.19	25.0	TOP OF SCREEN
716.19	35.0	BOTTOM OF SCREEN
716.19	35.0	BOTTOM OF WELL
716.19	35.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	25
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	10
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: MW-106

SITE NAME: Former Warner Electric BOREHOLE #: MW-106

STATE PLANE COORDINATE: X 2104932.1 Y 2607725.3 (or) LATITUDE ____° ____' ____" LONGITUDE ____° ____' ____"

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/2/10 DATE FINISHED: 2/2/09

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNUAL SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

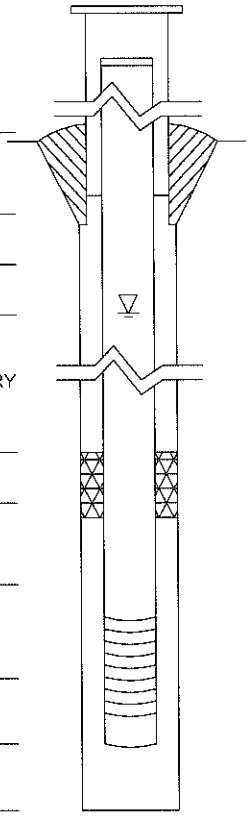
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
753.20	0.8	TOP OF RISER PIPE
753.96	0.00	GROUND SURFACE
752.96	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
752.96	1.0	TOP OF SEAL
730.96	23.0	TOP OF SANDPACK
728.96	25.0	TOP OF SCREEN
718.96	35.0	BOTTOM OF SCREEN
718.96	35.0	BOTTOM OF WELL
718.96	35.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:	
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:	
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:	
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:	

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	25
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	10
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Well Completion Report

SITE #: _____ COUNTY: Winnebago WELL #: MW-107

SITE NAME: Former Warner Electric BOREHOLE #: MW-107

STATE PLANE COORDINATE: X 2104997.6 Y 2607592.7 (or) LATITUDE ____ ° ____ ' ____ " LONGITUDE ____ ° ____ ' ____ "

SURVEYED BY: E. Short ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: Boart Longyear DRILLER: Jason Drabek

CONSULTING FIRM: RMT, Inc. GEOLOGIST: Ted O'Connell

DRILLING METHOD: Rotary Sonic DRILLING FLUIDS (TYPE): _____

LOGGED BY: Ted O'Connell DATE STARTED: 2/2/10 DATE FINISHED: 2/2/09

REPORT FORM COMPLETED BY: T. O'Connell DATE: 3/25/10

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: Bentonite Chips

TYPE OF ANNULAR SEALANT: Bentonite Chips

INSTALLATION METHOD: Poured

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR (PELLET) SLURRY (CIRCLE ONE)

INSTALLATION METHOD: Poured

SETTING TIME: _____

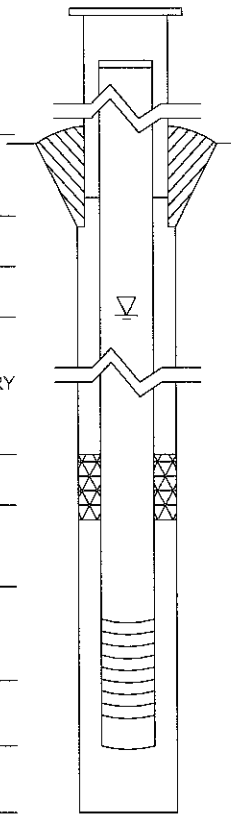
TYPE OF SAND PACK: Red Flint #40

GRAIN SIZE: #40 (SIEVE SIZE)

INSTALLATION METHOD: Poured

TYPE OF BACKFILL MATERIAL: _____ (IF APPLICABLE)

INSTALLATION METHOD: _____



ELEVATIONS (MSL)*	DEPTHS (BGS) (.01 ft)	
_____	_____	TOP OF PROTECTIVE CASING
753.78	0.4	TOP OF RISER PIPE
754.23	0.00	GROUND SURFACE
753.23	1.0	TOP OF ANNULAR SEALANT
_____	_____	STATIC WATER LEVEL (AFTER COMPLETION)
753.23	1.0	TOP OF SEAL
731.23	23.0	TOP OF SANDPACK
729.23	25.0	TOP OF SCREEN
719.23	35.0	BOTTOM OF SCREEN
719.23	35.0	BOTTOM OF WELL
719.23	35.00	BOTTOM OF BOREHOLE

* REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304	SS316	PTFE	PVC	OTHER:
RISER PIPE ABOVE W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
RISER PIPE BELOW W.T.	SS304	SS316	PTFE	(PVC)	OTHER:
SCREEN	SS304	SS316	PTFE	(PVC)	OTHER:

CASING MEASUREMENTS

DIAMETER OF BOREHOLE	(in)	6
ID OF RISER PIPE	(in)	2
PROTECTIVE CASING LENGTH	(ft)	
RISER PIPE LENGTH	(ft)	25
BOTTOM OF SCREEN TO END CAP	(ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	(ft)	10
TOTAL LENGTH OF CASING	(ft)	
SCREEN SLOT SIZE **	(in)	0.01

**HAND-SLOTTED WELL SCREENS ARE UNACCEPTABLE

(941014)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-01 Monitor Well No. LTMW-01

Site File Name Former Warner Electric Surface Elevation 750.3 Completion Depth 37.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104622.0 E.(Y) 2607373.1

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		80				
749.3			1							
748.3	**CLAYEY SAND (SC),** fine to medium grained sand, 35% to 45% fines, slightly plastic, very dark grayish black (10YR 3/2), no odor, moist.		2							
747.3			3							
746.3	**POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC),** fine to medium grained sand, 15% to 25% fines, 15% to 25% small to large gravel, dark brown (7.5YR 3/4), no odor, moist.		4							
745.3	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 30% to 40% small to large gravel, trace fines, yellowish brown (10YR 5/4), no odor, moist.		5	2		80				
744.3			6							
743.3			7							
742.3			8							
741.3			9							
740.3			10	3		100				

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-01 Monitor Well No. LTMW-01

Site File Name Former Warner Electric Surface Elevation 750.3 Completion Depth 37.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104622.0 E.(Y) 2607373.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
738.3			12							
737.3			13							
736.3			14							
735.3	**POORLY GRADED SAND (SP)** with gravel, fine grained sand, 15% to 25% large gravel, yellowish brown (10YR 5/4), no odor, moist, loose.		15	4		100				
734.3	As above, fine to medium grained, 35% to 45% small to large gravel.		16							
733.3			17							
732.3	As above, fine to medium grained sand, 10% to 20% large gravel.		18							
731.3			19							
730.3	As above, 30% to 40% small to large gravel.		20	5		100				
729.3			21							
	As above, fine to medium grained sand, 15% to 25% small to large gravel									

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-01 Monitor Well No. LTMW-01

Site File Name Former Warner Electric Surface Elevation 750.3 Completion Depth 37.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104622.0 E.(Y) 2607373.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
727.3			23							
726.3			24							
725.3	As above, fine to medium grained sand, wet.		25	6		83				
724.3			26							
723.3			27							
722.3			28							
721.3			29							
720.3			30							
719.3			31							
718.3			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-01 Monitor Well No. LTMW-01

Site File Name Former Warner Electric Surface Elevation 750.3 Completion Depth 37.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104622.0 E.(Y) 2607373.1

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	REMARKS
716.3			34	
715.3			35	
714.3			36	
713.3	E.O.B. at 37 feet bgs.		37	

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-02 Monitor Well No. LTMW-02

Site File Name Former Warner Electric Surface Elevation 749.9 Completion Depth 40.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104543.8 E.(Y) 2607511.4

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		100				
748.9			1							
747.9	**SILTY SAND (SM),** fine grained, 30% - 40% fines, very dark brown (10YR 2/2), no odor, moist		2							
746.9			3							
745.9	**POORLY GRADED SAND (SP)** with silt, fine grained sand, 10% to 20% fines, dark yellowish brown (10YR 4/4), no odor, moist, slightly dense.		4							
744.9			5							
743.9	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 25% - 35% small to large gravel, trace fines, dark yellowish brown (10YR 4/4), no odor, slightly moist.		6							
742.9			7							
741.9			8							
740.9			9							
739.9			10	2		100				

(950226)

IL_EPA_FIELD_BORING_LOG_2003 025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-02 Monitor Well No. LTMW-02

Site File Name Former Warner Electric Surface Elevation 749.9 Completion Depth 40.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104543.8 E.(Y) 2607511.4

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
737.9			12							
736.9			13							
735.9			14							
734.9	As above, 35% to 45% gravel, with trace cobbles, dark yellowish brown (10YR 4/6).		15	3		100				
733.9			16							
732.9			17							
731.9			18							
730.9			19							
729.9			20	4		100				
728.9	**POORLY GRADED SAND (SP)** with gravel, fine to medium grained, 10% small to large gravel, dark yellowish brown (10YR 4/6), no odor, moist, loose.		21							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-02 Monitor Well No. LTMW-02

Site File Name Former Warner Electric Surface Elevation 749.9 Completion Depth 40.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104543.8 E.(Y) 2607511.4

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
726.9			23							
725.9			24							
724.9			25	5		80				
723.9			26							
722.9			27							
721.9			28							
720.9			29							
719.9	As above, medium to coarse grained sand, very moist to wet. As above, fine grained, trace small gravel.		30	6		100				
718.9			31							
717.9			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-02 Monitor Well No. LTMW-02

Site File Name Former Warner Electric Surface Elevation 749.9 Completion Depth 40.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104543.8 E.(Y) 2607511.4

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
715.9			34							
714.9	**WELL GRADED SAND (SW)** with gravel, fine to coarse grained sand, 15% to 25% small to large gravel, dark yellowish brown (10YR 4/6), no odor, wet.		35							
713.9			36							
712.9			37							
711.9	**POORLY GRADED SAND (SP)**, fine grained, dark yellowish brown (10YR 4/4), no odor, wet, loose.		38							
710.9	**WELL GRADED SAND (SW)** with trace gravel, fine to coarse grained sand, small to medium gravel, dark yellowish brown (10YR 4/4), no odor, wet, loose.		39							
709.9	E.O.B. at 40 feet bgs.		40							

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Page 1 of 4

Site File No. _____ County Winnebago Boring No. LTMW-03 Monitor Well No. LTMW-03

Site File Name Former Warner Electric Surface Elevation 750.1 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104403.6 E.(Y) 2607620.2

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	Blind drilled to 35 feet. See boring log LTMW-03A for soil lithology descriptions.									
749.1			1							
748.1			2							
747.1			3							
746.1			4							
745.1			5							
744.1			6							
743.1			7							
742.1			8							
741.1			9							
740.1			10							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03 Monitor Well No. LTMW-03

Site File Name Former Warner Electric Surface Elevation 750.1 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104403.6 E.(Y) 2607620.2

Latitude ____° ____' ____" Longitude ____° ____' ____"

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
738.1			12							
737.1			13							
736.1			14							
735.1			15							
734.1			16							
733.1			17							
732.1			18							
731.1			19							
730.1			20							
729.1			21							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03 Monitor Well No. LTMW-03

Site File Name Former Warner Electric Surface Elevation 750.1 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104403.6 E.(Y) 2607620.2

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
727.1			23							
726.1			24							
725.1			25							
724.1			26							
723.1			27							
722.1			28							
721.1			29							
720.1			30							
719.1			31							
718.1			32							

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03 Monitor Well No. LTMW-03

Site File Name Former Warner Electric Surface Elevation 750.1 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104403.6 E.(Y) 2607620.2

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
716.1			34							
715.1	E.O.B. at 35 feet bgs.		35							

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03A Monitor Well No. LTMW-03A

Site File Name Former Warner Electric Surface Elevation 750.0 Completion Depth 45.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104404.0 E.(Y) 2607627.1

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	ORGANIC SOIL (OL), very dark brown (10YR 2/2), moist.			1		50				
749.0			1							
748.0			2							
747.0			3							
	SANDY SILT (ML), 20% - 30% fine to medium grained sand, dark yellowish brown (10YR 3/4), no odor, moist.									
746.0			4							
745.0			5							
744.0			6							
743.0			7							
742.0	**SILTY SAND (SM)**, fine to very fine grained sand, 25% - 35% fines, dark yellowish brown (10YR 4/4), no odor, moist.		8							
741.0			9							
740.0	**POORLY GRADED SAND WITH GRAVEL (SP)** medium grained sand, 25% - 35% small to large gravel, trace cobbles, dark yellowish brown (10YR 4/4), no odor, moist, loose.		10	2		100				

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Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03A Monitor Well No. LTMW-03A

Site File Name Former Warner Electric Surface Elevation 750.0 Completion Depth 45.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104404.0 E.(Y) 2607627.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	As above, medium to fine grained, dry.		12							
738.0										
737.0			13							
736.0			14							
	As above, medium grained, moist.									
735.0			15	3		100				
734.0			16							
733.0			17							
732.0	**POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM),** fine grained sand, 25% to 35% small to large gravel, 5% to 10% fines, trace cobbles, yellowish brown (10YR 5/4), no odor, dry, loose.		18							
731.0			19							
730.0			20	4		100				
729.0			21							
	POORLY GRADED SAND (SP) with trace gravel, fine to medium grained sand,									

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IL_EPA_FIELD_BORING_LOG_2003_025541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03A Monitor Well No. LTMW-03A

Site File Name Former Warner Electric Surface Elevation 750.0 Completion Depth 45.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104404.0 E.(Y) 2607627.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	yellowish brown (10YR 5/6), no odor, moist, loose.									
727.0			23							
726.0			24							
725.0	As above, medium to coarse grained, very moist.		25	5		100				
724.0			26							
723.0			27							
722.0	As above, medium to fine grained sand.		28							
721.0			29							
720.0	As above, wet.		30	6		100				
719.0			31							
718.0			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03A Monitor Well No. LTMW-03A

Site File Name Former Warner Electric Surface Elevation 750.0 Completion Depth 45.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104404.0 E.(Y) 2607627.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
716.0			34							
715.0	**WELL GRADED SAND (SW)**, with trace small to large gravel, fine to coarse grained sand, yellowish brown (10YR 5/6), no odor, wet, loose.		35	7		100				
714.0			36							
713.0			37							
712.0			38							
711.0			39							
710.0			40							
709.0			41							
708.0			42							
707.0			43							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-03A Monitor Well No. LTMW-03A

Site File Name Former Warner Electric Surface Elevation 750.0 Completion Depth 45.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/3/10 Finish 2/3/10

UTM (or State Plane) Coord. N.(X) 2104404.0 E.(Y) 2607627.1

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
705.0	E.O.B. at 45 feet bgs.		45							

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-04 Monitor Well No. LTMW-04

Site File Name Former Warner Electric Surface Elevation 749.0 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101512.9 E.(Y) 2606103.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		100				
748.0	**CLAYEY SAND WITH GRAVEL (SC),** medium grained sand, 25% to 35% small to large gravel, 10% to 20% fines, dark brown (7.5YR 3/2), no odor, moist.		1							
747.0	**POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC),** 25% to 35% small to medium gravel, medium grained sand, 10% to 20% fines, brown (10YR 4/3), no odor, moist, loose.		2							
746.0	**WELL GRADED SAND WITH GRAVEL (SW),** fine to medium grained sand, 30% to 40% small to large gravel, 10% fines, brown (10YR 4/3), no odor, dry, loose.		3							
745.0			4							
744.0			5	2		100				
743.0			6							
742.0			7							
	POORLY GRADED SAND WITH GRAVEL (SP), fine grained sand, 30% to 40% small to medium gravel, trace fines, brown (10YR 4/3), no odor, moist, loose.									
741.0			8							
740.0			9							
739.0			10	3		100				

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-04 Monitor Well No. LTMW-04

Site File Name Former Warner Electric Surface Elevation 749.0 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101512.9 E.(Y) 2606103.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
737.0			12							
736.0	**WELL GRADED SAND WITH GRAVEL (GW),** fine to coarse grained sand, 35% to 45% small to large gravel, trace fines, yellowish brown (10YR 5/4), no odor, moist, loose.		13							
735.0			14							
734.0			15	4		100				
733.0			16							
732.0			17							
731.0	**POORLY GRADED SAND (SP)** with gravel, fine grained sand, trace small gravel, yellowish brown (10YR 5/8), no odor, moist.		18							
730.0	**WELL GRADED SAND WITH GRAVEL (GW),** fine to coarse grained sand, 35% to 45% small to large gravel, trace fines, yellowish brown (10YR 5/4), no odor, moist, loose.		19							
729.0	**POORLY GRADED SAND (SP)** with silt and gravel, fine grained sand, 10% to 20% small to medium gravel, 10% to 20% fines, yellowish brown (10YR 5/8), no odor, slightly moist, loose.		20	5		100				
728.0			21							

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-04 Monitor Well No. LTMW-04

Site File Name Former Warner Electric Surface Elevation 749.0 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101512.9 E.(Y) 2606103.8

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
726.0	**WELL GRADED SAND WITH GRAVEL (GW),** fine to coarse grained sand, 35% to 45% small to large gravel, trace fines, yellowish brown (10YR 5/8), no odor, moist, loose.		23							
725.0	**POORLY GRADED SAND (SP)** with silt and gravel, fine grained sand, 10% to 20% small to medium gravel, 10% to 20% fines, yellowish brown (10YR 5/6), no odor, slightly moist, loose.		24							
724.0			25	6		100				
723.0			26							
	As above, fine to medium grained sand, trace small to medium gravel, trace fines.									
722.0			27							
721.0			28							
720.0			29							
719.0	As above, wet.		30	7		100				
718.0			31							
717.0			32							
	WELL GRADED SAND WITH GRAVEL (SW), fine to coarse grained sand, 20%									

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Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-04 Monitor Well No. LTMW-04

Site File Name Former Warner Electric Surface Elevation 749.0 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101512.9 E.(Y) 2606103.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	to 30% small to large gravel, trace cobbles, yellow brown (10YR 5/6), no odor, wet, loose.									
715.0	**POORLY GRADED SAND (SP)**, medium grained sand, yellowish brown (10YR 5/6), no odor, wet, loose.		34							
714.0			35	8		100				
713.0			36							
712.0	**WELL GRADED SAND (SW)**, fine to coarse grained sand, trace medium to large gravel, trace cobbles, dark yellowish brown (10YR 4/4), no odor, wet.		37							
711.0			38							
710.0			39							
709.0			40							
708.0			41							
707.0			42							
706.0			43							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-04 Monitor Well No. LTMW-04

Site File Name Former Warner Electric Surface Elevation 749.0 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101512.9 E.(Y) 2606103.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
704.0			45	9		100				
703.0			46							
702.0	**POORLY GRADED SAND (SP)**, fine to medium grained sand, trace small gravel, dark yellowish brown (10YR 4/4), no odor, wet, loose.		47							
701.0	**WELL GRADED SAND WITH GRAVEL (SW)**, fine to coarse grained sand, 15% to 25% small to medium gravel, dark yellowish brown (10YR 4/4), no odor, wet.		48							
700.0			49							
699.0			50							
698.0			51							
697.0			52							
696.0			53							
695.0			54							
	POORLY GRADED SAND (SP), medium grained sand, yellowish brown (10YR 4/4),									

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-04 Monitor Well No. LTMW-04

Site File Name Former Warner Electric Surface Elevation 749.0 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101512.9 E.(Y) 2606103.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	no odor, wet, loose.			10		75				
693.0	**WELL GRADED SAND (SW)**, fine to coarse grained sand, trace small gravel, dark yellowish brown (10YR 4/4), no odor, wet.		56							
692.0			57							
691.0			58							
690.0			59							
689.0			60							
688.0			61							
687.0			62							
686.0			63							
685.0			64							
684.0			65							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W.ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-04 Monitor Well No. LTMW-04

Site File Name Former Warner Electric Surface Elevation 749.0 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101512.9 E.(Y) 2606103.8

Latitude ___ ° ___ ' ___ " Longitude ___ ° ___ ' ___ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet
682.0	**POORLY GRADED SAND (SP),** fine to medium grained sand, trace small gravel, yellowish brown (10YR 5/6), no odor, wet, loose.		67
681.0			68
680.0			69
679.0			70
678.0			71
677.0			72
676.0			73
675.0			74
674.0	**WELL GRADED SAND (SW),** fine to coarse grained sand, trace small gravel, dark yellowish brown (10YR 4/4), no odor, wet.		75
	E.O.B. at 75 feet bgs.		

REMARKS

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ___° ___' ___" Longitude ___° ___' ___"

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		100				
748.7	**CLAYEY SAND WITH GRAVEL(SC),** medium grained sand, 20% to 30% small to medium gravel, 15% to 25% fines, dark brown (7.5YR 3/4), no odor, moist.		1							
747.7	**WELL GRADED GRAVEL WITH SAND (GW),** small to large gravel, 35% to 45% fine to coarse grained sand, dark yellowish brown (10YR 4/6), no odor, slightly moist, loose.		2							
746.7			3							
745.7			4							
744.7			5	2		100				
743.7			6							
742.7			7							
741.7	**POORLY GRADED GRAVEL WITH SAND (GP),** small to medium gravel, 30% to 40% medium grained sand, 10% to 20% fines, light yellowish brown (10YR 6/4), no odor, slightly moist, loose.		8							
740.7			9							
739.7	**WELL GRADED GRAVEL WITH SAND (GW),** small to large gravel, 35% to 45% fine to coarse grained sand, 10% to 15% fines, yellowish brown (10YR 4/6), no odor, moist, loose.		10	3		100				

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
737.7			12							
736.7			13							
735.7			14							
734.7			15	4		100				
733.7			16							
732.7			17							
731.7	**POORLY GRADED SAND WITH GRAVEL (SP),** fine to medium grained sand, 20% to 30% medium to large gravel, 10% to 20% fines, yellowish brown (10YR 4/6), no odor, slightly moist, loose.		18							
730.7			19							
729.7			20	5		80				
728.7			21							

IL_EPA_FIELD_BORING_LOG_2003 025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

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Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
726.7			23							
725.7			24							
724.7	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 35% to 45% small to large gravel, 5% to 15% fines, no odor, moist, loose.		25							
723.7			26							
722.7			27							
721.7	**POORLY GRADED SAND (SP),** fine to medium grained, 5% to 15% fines, yellowish brown (10YR 5/4), no odor, slightly moist, loose.		28							
720.7	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 35% to 45% small to large gravel, 5% to 15% fines, no odor, moist, loose.		29							
719.7	**POORLY GRADED SAND WITH GRAVEL (SP),** fine to medium grained, 20% to 30% small to medium gravel, 5% to 15% fines, brown (10YR 5/3), no odor, moist, loose.		30	6		80				
718.7			31							
717.7			32							

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IL_EPA_FIELD_BORING_LOG_2003_02541W.ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
715.7	As above, trace gravel, yellowish brown (10YR 5/4).		34							
714.7			35							
713.7			36							
712.7			37							
711.7			38							
710.7			39							
709.7	As above, wet.		40	7		75				
708.7			41							
707.7			42							
706.7			43							

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL: G - Ted O'Connell; D - Jason Drabek; H - ; H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet
704.7			45
703.7			46
702.7	**WELL GRADED SAND (SW)**, fine to coarse grained sand, trace large gravel, brown (10YR 4/3), no odor, wet, loose.		47
701.7			48
700.7			49
699.7			50
698.7			51
697.7	**POORLY GRADED SAND (SP)**, fine to medium grained, brown (10YR 4/3), no odor, wet, loose.		52
696.7	**WELL GRADED SAND WITH GRAVEL (SW)** fine to coarse grained sand, 30% to 40% small to large gravel, 5% to 15% fines, brown (10YR 4/3), no odor, moist, loose.		53
695.7			54

REMARKS

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IL_EPA_FIELD_BORING_LOG_2003_025415W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
693.7	**POORLY GRADED SAND (SP)**, medium grained, brown (10YR 5/3), no odor, wet.		56							
692.7			57							
691.7			58							
690.7	As above, fine grained, slightly dense.		59							
689.7	As above, medium grained.		60	8		75				
688.7			61							
687.7			62							
686.7			63							
685.7			64							
684.7			65							

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL: G - Ted O'Connell; D - Jason Drabek; H - ; H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	REMARKS
682.7			67	
681.7	As above, coarse grained, with trace small gravel.		68	
680.7			69	
679.7			70	
678.7			71	
677.7			72	
676.7			73	
675.7			74	
674.7			75	
673.7			76	

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-05 Monitor Well No. LTMW-05

Site File Name Former Warner Electric Surface Elevation 749.7 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101447.6 E.(Y) 2606181.4

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
671.7	As above, fine to medium grained.		78							
670.7			79							
669.7			80	9		59				
668.7			81							
667.7			82							
666.7			83							
665.7			84							
664.7	E.O.B. at 85 feet bgs.		85							

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Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-06 Monitor Well No. LTMW-06

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 70.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101393.0 E.(Y) 2606253.7

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		80				
749.4	**POORLY GRADED SAND WITH GRAVEL (SP)**and clay, medium grained, 25% to 35% small to large gravel, 5% to 10% fines, dark brown (7.5YR 3/3), no odor, moist, loose.		1							
748.4			2							
747.4			3							
746.4			4							
745.4			5							
744.4			6							
743.4			7							
742.4	As above, fine grained, very pale brown (10YR 7/4), dry.		8							
741.4			9							
740.4			10	2		100				

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-06 Monitor Well No. LTMW-06

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 70.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101393.0 E.(Y) 2606253.7

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
738.4	**WELL GRADED SAND WITH GRAVEL(SP)**, fine to coarse grained, 35% to 45% small to large gravel, yellowish brown (10YR 5/6), no odor, moist, loose.		12							
737.4			13							
736.4	**POORLY GRADED SAND WITH GRAVEL (SP)**, and clay, medium grained, 25% to 35% small to medium gravel, 5% to 10% fines, dark brown (7.5YR 3/3), no odor, dry, loose.		14							
735.4			15	3		100				
734.4	**WELL GRADED GRAVEL WITH SAND (GW)**, small to large gravel, 35% to 45% fine to coarse grained sand, light yellowish brown (10YR 6/4), no odor, moist, loose.		16							
733.4			17							
732.4			18							
731.4			19							
730.4			20	4		100				
729.4			21							
	POORLY GRADED SAND (SP), fine grained, trace small gravel, light yellowish									

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Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-06 Monitor Well No. LTMW-06

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 70.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101393.0 E.(Y) 2606253.7

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	brown (10YR 6/4), no odor, slightly moist, loose.									
727.4			23							
726.4			24							
725.4			25	5		100				
724.4			26							
723.4			27							
722.4			28							
721.4			29							
720.4			30	6		85				
719.4	As above, 20% to 30% medium gravel, grayish brown (10YR 5/2).		31							
718.4			32							

(950226)

IL EPA FIELD BORING LOG 2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-06 Monitor Well No. LTMW-06

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 70.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101393.0 E.(Y) 2606253.7

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	As above, very moist.									
716.4			34							
715.4			35							
714.4			36							
713.4			37							
712.4			38							
711.4			39							
710.4			40	7		100				
709.4			41							
708.4			42							
707.4			43							

(950226)

IL_EPA_FIELD_BORING_LOG 2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-06 Monitor Well No. LTMW-06

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 70.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101393.0 E.(Y) 2606253.7

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
705.4	**WELL GRADED SAND (GW),** fine to coarse grained, trace medium gravel, dark grayish brown (10YR 4/2), no odor, wet.		45							
704.4			46							
703.4			47							
702.4	**POORLY GRADED SAND (SP),** fine to medium grained, dark grayish brown (10YR 4/2), no odor, wet.		48							
701.4	**WELL GRADED SAND (SW),** fine to coarse grained, trace small gravel, dark grayish brown (10YR 4/2), no odor, wet.		49							
700.4			50							
699.4			51							
698.4			52							
697.4			53							
696.4	**POORLY GRADED SAND (SP),** fine to medium grained, dark yellowish brown (10YR 4/4), no odor, wet.		54							

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-06 Monitor Well No. LTMW-06

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 70.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101393.0 E.(Y) 2606253.7

Latitude ___ ° ___ ' ___ " Longitude ___ ° ___ ' ___ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
694.4			56							
693.4			57							
692.4			58							
691.4			59							
690.4			60	8		100				
689.4			61							
688.4			62							
687.4			63							
686.4			64							
685.4			65							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-06 Monitor Well No. LTMW-06

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 70.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 2/4/10 Finish 2/4/10

UTM (or State Plane) Coord. N.(X) 2101393.0 E.(Y) 2606253.7

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
683.4			67							
	As above, with 25% to 35% small to medium gravel.									
682.4	As above, medium grained sand.		68							
681.4			69							
680.4	E.O.B. at 70 feet bgs.		70							

SAMPLES

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-07 Monitor Well No. LTMW-07

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 3/3/10 Finish 3/3/10

UTM (or State Plane) Coord. N.(X) 2101307.9 E.(Y) 2606351.8

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		100				
749.4	**CLAYEY SAND WITH GRAVEL (SC),** medium grained, 20% to 30% small to large gravel, 10% to 20% fines, dark brown (10YR 3/3), no odor, moist.		1							
748.4			2							
747.4	**POORLY GRADED SAND (SP)** with gravel, fine to medium grained sand, 30% to 40% small to medium gravel, 10% to 20% fines, yellowish brown (10YR 5/4), no odor, moist.		3							
746.4			4							
745.4			5	2		60				
744.4			6							
743.4	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 30% to 40% small to large gravel, yellowish brown (10YR 5/4), no odor, moist.		7							
742.4			8							
741.4			9							
740.4			10	3		100				

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-07 Monitor Well No. LTMW-07

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 3/3/10 Finish 3/3/10

UTM (or State Plane) Coord. N.(X) 2101307.9 E.(Y) 2606351.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
738.4			12							
737.4	**POORLY GRADED SAND (SP)**, fine to medium grained sand, trace gravel, trace fines, yellowish brown (10YR 5/4), no odor, moist.		13							
736.4	As above, 30% to 40% small to medium gravel, trace cobbles, slightly moist.		14							
735.4			15	4		100				
734.4			16							
733.4			17							
732.4			18							
731.4			19							
730.4			20	5		100				
729.4			21							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-07 Monitor Well No. LTMW-07

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 3/3/10 Finish 3/3/10

UTM (or State Plane) Coord. N.(X) 2101307.9 E.(Y) 2606351.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
727.4	**WELL GRADED SAND WITH GRAVEL (SW)**, fine to coarse grained sand, 35% to 45% small to large gravel, trace cobbles, dark yellowish brown (10YR 4/6), no odor, moist.		23							
726.4			24							
725.4			25							
724.4			26							
723.4			27							
722.4	**POORLY GRADED SAND (SP)**, fine grained sand, dark yellowish brown (10YR 4/6), no odor, moist.		28							
721.4			29							
720.4			30	6		85				
719.4			31							
718.4			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-07 Monitor Well No. LTMW-07

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 3/3/10 Finish 3/3/10

UTM (or State Plane) Coord. N.(X) 2101307.9 E.(Y) 2606351.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
716.4			34							
715.4			35							
714.4			36							
713.4			37							
712.4			38							
711.4			39							
710.4			40	7		60				
709.4			41							
708.4			42							
707.4			43							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-07 Monitor Well No. LTMW-07

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 3/3/10 Finish 3/3/10

UTM (or State Plane) Coord. N.(X) 2101307.9 E.(Y) 2606351.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
705.4	**WELL GRADED SAND (SW),** fine to coarse grained sand, trace small to medium gravel, yellowish brown (10YR 5/4), no odor, wet.		45							
704.4			46							
703.4			47							
702.4			48							
701.4			49							
700.4			50							
699.4			51							
698.4			52							
697.4			53							
696.4			54							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-07 Monitor Well No. LTMW-07

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 3/3/10 Finish 3/3/10

UTM (or State Plane) Coord. N.(X) 2101307.9 E.(Y) 2606351.8

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
694.4			56							
693.4			57							
692.4	**POORLY GRADED SAND (SP)**, fine to medium grained sand, dark yellowish brown (10YR 4/6), no odor, wet.		58							
691.4			59							
690.4			60	8		80				
689.4			61							
688.4	**WELL GRADED SAND (SW)**, fine to coarse grained sand, trace small to medium gravel, yellowish brown (10YR 5/4), no odor, wet.		62							
687.4			63							
686.4			64							
685.4			65							

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Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-07 Monitor Well No. LTMW-07

Site File Name Former Warner Electric Surface Elevation 750.4 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 29 T. 46 R. 2E Date: Start 3/3/10 Finish 3/3/10

UTM (or State Plane) Coord. N.(X) 2101307.9 E.(Y) 2606351.8

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	REMARKS
683.4			67	
682.4			68	
681.4			69	
680.4			70	
679.4			71	
	As above, 30% to 40% small to medium gravel.			
678.4	**WELL GRADED GRAVEL (GW),** with sand, small to large sub round to round gravel, 10% to 20% medium to coarse grained sand, no odor, wet.		72	
677.4			73	
676.4	**WELL GRADED SAND (SW),** fine to coarse grained sand, 10% to 20% small to medium gravel, yellowish brown (10YR 5/4), no odor, wet.		74	
675.4	E.O.B. at 75 feet bgs.		75	

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-08 Monitor Well No. LTMW-08

Site File Name Former Warner Electric Surface Elevation 726.6 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099520.5 E.(Y) 2605553.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		100				
725.6	**CLAYEY SAND WITH GRAVEL(SC),** fine to medium grained sand, 25% to 35% small to medium gravel, 10% to 20% fines, no odor, slightly moist.		1							
724.6			2							
723.6	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained, 20% to 30% small to large gravel, no odor, moist.		3							
722.6			4							
721.6			5	2		100				
720.6			6							
719.6	**POORLY GRADED SAND (SP),** medium grained sand, trace medium to large gravel, no odor, moist.		7							
718.6			8							
717.6			9							
	As above, fine grained.									
716.6	As above, fine to medium grained sand, 10% to 20% small gravel, trace fines.		10	3		80				

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-08 Monitor Well No. LTMW-08

Site File Name Former Warner Electric Surface Elevation 726.6 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099520.5 E.(Y) 2605553.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
714.6			12							
713.6			13							
712.6			14							
711.6			15							
710.6			16							
	As above, medium grained sand, trace small gravel.									
709.6	As above, fine grained, (10YR 4/5), wet.		17							
708.6			18							
707.6			19							
706.6			20	4		43				
705.6			21							

(950226)

IL EPA FIELD BORING LOG 2003 02641W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-08 Monitor Well No. LTMW-08

Site File Name Former Warner Electric Surface Elevation 726.6 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099520.5 E.(Y) 2605553.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
703.6	**WELL GRADED SAND (SW)** with gravel, fine to coarse grained, 15% to 25% small to large gravel, (10YR 4/6), no odor, moist.		23							
702.6			24							
701.6			25							
700.6			26							
699.6	**POORLY GRADED SAND WITH GRAVEL (SP)**, fine to medium grained sand, 25% to 35% medium to large gravel, (10YR 4/6), no odor, moist.		27							
698.6			28							
697.6			29							
696.6	**WELL GRADED SAND WITH GRAVEL (SW)**, with gravel, fine to coarse grained, (10YR 4/6) 15% to 25% small to large gravel, no odor, moist.		30							
695.6			31							
694.6			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-08 Monitor Well No. LTMW-08

Site File Name Former Warner Electric Surface Elevation 726.6 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099520.5 E.(Y) 2605553.9

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
692.6			34							
691.6	**POORLY GRADED SAND (SP)**, fine to medium grained sand, (10YR 4/6), no odor, wet.		35	5		90				
	WELL GRADED SAND WITH GRAVEL (SW), fine to coarse grained, (10YR 4/6) 35% to 45% small to large gravel, trace large cobbles, no odor, wet.									
690.6	**POORLY GRADED SAND (SP)**, fine to medium grained sand, trace small gravel, (10YR 4/6), no odor, wet.		36							
689.6	**WELL GRADED SAND (SW)**, fine to coarse grained, trace small gravel, (10YR 5/4), no odor, wet.		37							
688.6			38							
687.6			39							
686.6			40							
685.6			41							
684.6			42							
683.6	**POORLY GRADED SAND (SP)**, fine to medium grained sand, trace small gravel, (10YR 5/4), no odor, wet.		43							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-08 Monitor Well No. LTMW-08

Site File Name Former Warner Electric Surface Elevation 726.6 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099520.5 E.(Y) 2605553.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
681.6			45							
680.6			46							
679.6	**WELL GRADED SAND (SW)**, fine to coarse grained, trace small gravel, (10YR 5/4), no odor, wet.		47							
678.6			48							
677.6			49							
676.6			50							
675.6			51							
674.6	**POORLY GRADED SAND (SP)**, fine to medium grained sand, trace small gravel, (10YR 5/4), no odor, wet.		52							
673.6			53							
672.6			54							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-08 Monitor Well No. LTMW-08

Site File Name Former Warner Electric Surface Elevation 726.6 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099520.5 E.(Y) 2605553.9

Latitude ___ ° ___ ' ___ " Longitude ___ ° ___ ' ___ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
670.6			56	6		80				
669.6			57							
668.6			58							
667.6			59							
666.6			60							
665.6			61							
664.6			62							
663.6			63							
662.6			64							
661.6	**WELL GRADED SAND (SW)**, fine to coarse grained, 25% to 35% small gravel, (10YR 5/4), no odor, wet.		65							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-08 Monitor Well No. LTMW-08

Site File Name Former Warner Electric Surface Elevation 726.6 Completion Depth 75.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099520.5 E.(Y) 2605553.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
659.6			67							
658.6			68							
657.6			69							
656.6			70							
655.6			71							
654.6	**POORLY GRADED SAND (SP)**, fine to medium grained sand, trace small gravel, (10YR 5/4), no odor, wet.		72							
653.6			73							
652.6			74							
651.6	E.O.B. at 75 feet bgs.		75							

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-09 Monitor Well No. LTMW-09

Site File Name Former Warner Electric Surface Elevation 729.6 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099451.8 E.(Y) 2605768.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		100				
728.6	**ORGANIC SOIL (OL),** dark brown, no odor, moist, loose.		1							
727.6			2							
726.6			3							
725.6	**CLAYEY SAND WITH GRAVEL (SC),** medium grained sand, 20% to 30% small to medium gravel, 10% to 20% fines, dark brown (10YR 2/2), no odor, moist.		4							
724.6			5	2		100				
723.6	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 25% to 35% small to large gravel, 5% to 15% fines, (10YR 5/6), no odor, moist, loose.		6							
722.6			7							
721.6			8							
720.6			9							
719.6			10	3		80				

(950226)

IL_EPA_FIELD_BORING_LOG_2003_025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-09 Monitor Well No. LTMW-09

Site File Name Former Warner Electric Surface Elevation 729.6 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099451.8 E.(Y) 2605768.9

Latitude ___ ° ___ ' ___ " Longitude ___ ° ___ ' ___ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
717.6			12							
716.6			13							
715.6			14							
714.6			15							
713.6			16							
712.6	**POORLY GRADED SAND (SP)**, fine grained, (10YR 5/6), no odor, moist, loose.		17							
711.6			18							
710.6			19							
709.6	As above, wet.		20	4		100				
708.6			21							

IL_EPA_FIELD_BORING_LOG_2003 025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-09 Monitor Well No. LTMW-09

Site File Name Former Warner Electric Surface Elevation 729.6 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099451.8 E.(Y) 2605768.9

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	As above, medium grained.		23							
706.6										
	As above, coarse grained sand with 20% to 30% small to medium gravel.		24							
705.6										
704.6			25							
703.6			26							
702.6	As above, fine grained.		27							
701.6	**WELL GRADED GRAVEL WTIH SAND (GW),** small to large gravel, 15% to 25% coarse grained sand, no odor, wet, loose.		28							
700.6			29							
	Poor recovery from 30 - 35 feet, drillers indicate that it is likely gravel with large cobbles.		30	5		100				
699.6										
698.6			31							
697.6			32							

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-09 Monitor Well No. LTMW-09

Site File Name Former Warner Electric Surface Elevation 729.6 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099451.8 E.(Y) 2605768.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet
695.6			34
694.6	**POORLY GRADED SAND (SP)**, fine to medium grained, (10YR 5/6), no odor, wet.		35
693.6			36
692.6			37
691.6			38
690.6			39
689.6			40
688.6			41
687.6			42
686.6	**WELL GRADED SAND (SW)**, fine to coarse grained, with trace small to large gravel, (10YR 5/6), no odor, wet.		43

REMARKS

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-09 Monitor Well No. LTMW-09

Site File Name Former Warner Electric Surface Elevation 729.6 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099451.8 E.(Y) 2605768.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
684.6			45	6		60				
683.6			46							
682.6			47							
681.6			48							
680.6	**WELL GRADED GRAVEL (GW)** with sand and large cobbles, small to large gravel, 15% to 25% medium grained sand, trace cobbles, no odor, wet.		49							
679.6	**POORLY GRADED SAND (SP)**, fine to medium grained sand, (10YR 5/6), no odor, wet.		50							
678.6			51							
677.6			52							
676.6			53							
675.6			54							

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-09 Monitor Well No. LTMW-09

Site File Name Former Warner Electric Surface Elevation 729.6 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/9/10 Finish 2/9/10

UTM (or State Plane) Coord. N.(X) 2099451.8 E.(Y) 2605768.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	E.O.B. at 55 feet bgs									

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IL_EPA_FIELD_BORING_LOG 2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-10 Monitor Well No. LTMW-10

Site File Name Former Warner Electric Surface Elevation 725.9 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099448.8 E.(Y) 2605913.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		80				
724.9	**CLAYEY SAND (SC)** with trace small to large gravel, medium grained sand, 25% to 35% fines, strong brown (7.5YR 4/4), no odor, moist.		1							
723.9			2							
722.9			3							
721.9	**SILT WITH SAND (ML),** 20% to 30% fine grained sand, black to dark brown (10YR 2/1), no odor, moist.		4							
720.9			5	2		40				
719.9	**CLAYEY SAND (SC)** with trace small to large gravel, medium grained sand, 25% to 35% fines, strong brown (7.5YR 4/4), no odor, moist.		6							
718.9			7							
717.9			8							
716.9			9							
715.9	**POORLY GRADED SAND (SP),** medium grained sand, trace small gravel, yellowish brown (10YR 5/6), no odor, moist.		10	3		80				

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-10 Monitor Well No. LTMW-10

Site File Name Former Warner Electric Surface Elevation 725.9 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099448.8 E.(Y) 2605913.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
713.9			12							
712.9	**WELL GRADED SAND (SW)**, fine to coarse grained sand, trace small gravel, yellowish brown (10YR 5/4), no odor, wet.		13							
711.9			14							
710.9			15							
709.9			16							
708.9			17							
707.9			18							
706.9			19							
705.9			20	4		100				
704.9			21							

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Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-10 Monitor Well No. LTMW-10

Site File Name Former Warner Electric Surface Elevation 725.9 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099448.8 E.(Y) 2605913.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
702.9			23							
701.9			24							
700.9	**POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained sand, 25% to 35% small to medium gravel, 5% to 15% fines, yellowish brown (10YR 5/6), no odor, wet.		25							
699.9			26							
698.9	As above, medium grained sand.		27							
697.9			28							
696.9			29							
695.9	As above, medium to coarse grained, 30% to 40% small to medium gravel.		30	5		100				
694.9			31							
693.9			32							

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-10 Monitor Well No. LTMW-10

Site File Name Former Warner Electric Surface Elevation 725.9 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099448.8 E.(Y) 2605913.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
691.9			34							
690.9			35							
689.9			36							
688.9			37							
687.9			38							
686.9			39							
685.9			40							
684.9			41							
683.9			42							
682.9			43							

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-10 Monitor Well No. LTMW-10

Site File Name Former Warner Electric Surface Elevation 725.9 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099448.8 E.(Y) 2605913.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
680.9			45	6		80				
679.9			46							
678.9			47							
677.9			48							
676.9			49							
675.9			50							
674.9			51							
673.9			52							
672.9			53							
671.9	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 35% to 45% small to large gravel, dark yellowish brown (10YR 4/6), no odor, wet.		54							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W.ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-10 Monitor Well No. LTMW-10

Site File Name Former Warner Electric Surface Elevation 725.9 Completion Depth 55.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099448.8 E.(Y) 2605913.9

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	E.O.B at 55 feet bgs.									

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Page 1 of 8

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude ____° ____' ____" Longitude ____° ____' ____"

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	TOPSOIL.			1		80				
731.5	**SILTY SAND WITH GRAVEL (SM),** fine to medium grained sand, 15% to 25% small to medium gravel, 10% to 20% fines, dark yellowish brown (10YR 4/6), no odor, moist.		1							
730.5			2							
729.5			3							
728.5			4							
727.5			5	2		100				
726.5			6							
725.5	**POORLY GRADED SAND (SP),** fine to medium grained, trace small to medium gravel, yellowish brown (10YR 5/6), no odor, moist, loose.		7							
724.5	As above, 25% to 35% small to medium gravel.		8							
723.5			9							
722.5	As above, brownish yellow (10YR 6/6).		10	3		100				

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude _____ ° _____ ' _____ " Longitude _____ ° _____ ' _____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
720.5			12							
719.5			13							
718.5			14							
717.5			15							
716.5			16							
715.5			17							
714.5	As above, fine grained sand, light yellowish brown (10YR 6/4), slightly moist.		18							
713.5			19							
712.5	As above, moist.		20	4		100				
711.5			21							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
709.5			23							
708.5			24							
707.5			25							
706.5			26							
705.5	**WELL GRADED SAND (SW)**, fine to coarse grained sand, trace small to medium gravel, brownish yellow (10YR 6/6), no odor, wet.		27							
704.5			28							
703.5			29							
702.5			30	5		75				
701.5			31							
700.5			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude ___ ° ___ ' ___ " Longitude ___ ° ___ ' ___ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL: G - Ted O'Connell; D - Jason Drabek; H - ; H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	REMARKS
698.5			34	
697.5			35	
696.5			36	
695.5			37	
694.5			38	
693.5			39	
692.5	**POORLY GRADED SAND (SP)**, fine to medium grained sand, yellowish brown (10YR 5/4), no odor, wet.		40	
691.5			41	
690.5			42	
689.5			43	

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
687.5			45							
686.5			46							
685.5			47							
684.5			48							
683.5			49							
682.5			50	6		60				
681.5			51							
680.5			52							
679.5			53							
678.5			54							

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
676.5	**WELL GRADED SAND WITH GRAVEL (SW)**, fine to coarse grained sand, 15% to 25% small to large gravel, brownish yellow (10YR 6/6), no odor, wet.		56							
675.5			57							
674.5			58							
673.5			59							
	POORLY GRADED SAND (SP), fine to medium grained sand, trace small to medium gravel, yellowish brown (10YR 5/4), no odor, wet.									
672.5			60	7		60				
671.5			61							
670.5			62							
669.5			63							
668.5			64							
667.5			65							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
665.5			67							
664.5			68							
663.5			69							
662.5	**POORLY GRADED GRAVEL (GP),** medium to large gravel, trace large cobbles (> 4"), no odor, wet. No recovery from 70 - 85 feet bgs. Large cobbles encountered at 70', drillers notes indicate drilling felt like gravel from 70 - 85 feet bgs.		70	8		0				
661.5			71							
660.5			72							
659.5			73							
658.5			74							
657.5			75							
656.5			76							

IL_EPA_FIELD_BORING_LOG_2003_02641W_ILEPA.GPJ IL_EPABW.GDT 4/13/10

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. LTMW-11 Monitor Well No. LTMW-11

Site File Name Former Warner Electric Surface Elevation 732.5 Completion Depth 85.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 32 T. 46 R. 2E Date: Start 2/8/10 Finish 2/8/10

UTM (or State Plane) Coord. N.(X) 2099440.9 E.(Y) 2606005.1

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

SAMPLES: SAMPLE NO. | SAMPLE TYPE | SAMPLE RECOVERY (%) | PENETROMETER | N VALUES (BLOW COUNTS) | OVA or HNU READINGS

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet
654.5			78
653.5			79
652.5			80
651.5			81
650.5			82
649.5			83
648.5			84
647.5	E.O.B. at 85 feet bgs.		85

REMARKS

IL_EPA_FIELD_BORING_LOG_2003_025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

(950226)

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-101

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Warner Electric	9/15/08	9/15/08	2541.27

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
On-Site Environmental	Direct Push	---	---	35.5	2

Boring Location:	Personnel	Drilling Equipment:
NW ¼ of NW ¼ of Section 28, T 46 R 12 E	Logged By - Ted O'Connell Driller - Tony Kapugi	Geoprobe

Civil Town/City/or Village:	County:	State:	Water Level Observations:
Roscoe	Winnebago	Illinois	While Drilling: Date/Time ▽ Depth (ft bgs) 27 After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
			0	**CONCRETE**					
				SILTY SAND (SM) with gravel, fine to medium grained sand, 20% fines, 20% small to large gravel, non plastic, brown 10YR 5/3, slight odor, dry.	SM				
1 GP	67		2	**POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM)**, fine to medium grained sand, 20% to 25% fines, 15% to 20% small to large gravel, non plastic, very dark brown 10YR 3/2, slight odor, slightly moist.	SP-SM			2.7	
			4	Same as above w/ 10% to 15% gravel.					
			6	**SILTY SAND (SM)**, fine to medium grained sand, 20% to 30% fines, non plastic, dark brown 10YR 3/3, no odor, moist, dense.	SM				
2 GP	92			**POORLY GRADED SAND (SP)**, fine to medium grained, 5% to 10% fines, non plastic, brown 10YR 4/3, no odor, moist, slightly dense.	SP			5.4	
			8	**CLAYEY SAND (SC)** with trace gravel, fine to medium grained sand, 25% to 30% fines, 5% to 10% small to medium gravel, slightly plastic, dark yellowish brown 10YR 3/4, no odor, slightly moist.	SC				
				POORLY GRADED SAND WITH GRAVEL (SP), medium grained sand, 20% to 25% small to large gravel, non plastic, light yellowish brown 10YR 6/4, no odor, dry, loose.	SP				
3 GP	100		10	**SILTY SAND (SM)**, fine to medium grained sand, 20% fines, slightly plastic, very dark grayish brown 10YR 3/2, no odor, slightly moist.	SM			0.0	
			12	**SILTY SAND (SM)**, fine to medium grained sand, 10% fines, non plastic, yellowish brown 10YR 5/4, no odor, slightly moist.	SC				
				CLAYEY SAND WITH GRAVEL (SC), fine to medium grained sand, 15% to 25% fines, 5% to 10% gravel, slightly plastic, dark yellowish brown 10YR 4/4, no odor, slightly moist.	SP				
4 GP	50		14	**POORLY GRADED SAND WITH GRAVEL (SP)**, fine to medium grained sand, 30% to 40% small to large gravel, non plastic, light yellowish brown 10YR 6/4, no odor, dry, loose.				1.8	
			16	Same as above, slightly moist at 18 feet.					
			18						

SOIL BORING WELL CONSTRUCTION LOG DANAWARNERELECTRIC 02541 GENERIC.GPJ RMT_CORP.GDT 2541.27 10/1/12

Signature:

Firm: TRC Environmental Corporation 608.826.3600
708 Heartland Trail Madison WI 53717 Fax 608.826.3941

Checked By: J. Buss

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-101

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
5 GP	100		22	Same as above, slight odor.				4.4	
			24						
			26	Same as above, wet at 27 feet.					
6 GP	100		28	▽	SP			5.4	
			30	Augers used from 30 to 35.5 feet, cuttings logged for description.					
			32						
			34						
			36	**End of boring at 35.5 feet.**					
			38						
			40						
			42						
			44						
			46						

SOIL BORING WELL CONSTRUCTION LOG DANAWARNERELECTRIC 02541 GENERIC.GPJ RMT_CORP.GDT 2541.27 10/1/12

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-102

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Warner Electric	9/15/08	9/15/08	2541.27

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
On-Site Environmental	Direct Push	---	---	35.5	2

Boring Location:	Personnel	Drilling Equipment:
NW ¼ of NW ¼ of Section 28, T 46 R 12 E	Logged By - Ted O'Connell Driller - Tony Kapugi	Geoprobe

Civil Town/City/or Village:	County:	State:	Water Level Observations:
Roscoe	Winnebago	Illinois	While Drilling: Date/Time ▽ Depth (ft bgs) 27 After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
			0	**CONCRETE**		///			
1 GP	67		2	**SILTY SAND WITH GRAVEL (SM)**, fine to medium grained sand, 15% to 25% small to large gravel, 10% to 20% fines, non plastic, dark brown 10YR 3/3, slight odor, slightly moist, loose.	SM			4.5	
			4	**SILTY SAND (SM)**, fine to medium grained sand, 20% to 30% fines, very dark brown - black 10YR 2/1, no odor, slightly moist.	SM				
2 GP	92		6	**POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained sand, 20% to 25% small to medium gravel, non plastic, yellowish brown 10YR 5/4, slight odor, slightly moist, loose.	SP			9.0	
				SILTY SAND (SM), fine grained sand, 20% to 30% fines, very dark brown - black 10YR 2/1, no odor, slightly moist.	SM				
			8	**POORLY GRADED SAND (SP)**, fine grained sand, non plastic, dark yellowish brown 10YR 4/6, no odor, moist.	SP				
				SILTY SAND (SM), fine grained sand, 30% to 40% fines, slightly plastic, dark brown 7.5YR 3/3, no odor, moist.	SM				
3 GP	100		10	**POORLY GRADED SAND WITH GRAVEL (SP)**, fine to medium grained sand, 20% to 30% small to large gravel, non plastic, slight odor, dry, loose.	SP			1.8	
			12						
			14						
				SILT (ML), non plastic, brown 7.5YR 5/4, no odor, slightly moist.	ML				
			16	**POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM)**, 15% to 20% fines, 15% to 20% small to large gravel, non plastic, yellowish brown 10YR 5/4, slight odor, slightly moist, loose.	SP-SM				
4 GP	50			**POORLY GRADED SAND WITH GRAVEL (SP)**, fine to medium grained sand, 20% small to large gravel, non plastic, very pale brown 10YR 7/4, no odor, dry, loose.	SP			1.8	
			18						

SOIL BORING WELL CONSTRUCTION LOG DANAWARNERELECTRIC 02541 GENERIC.GPJ RMT_CORP.GDT 2541.27 10/1/12

Signature:

Firm: TRC Environmental Corporation
708 Heartland Trail Madison WI 53717

608.826.3600
Fax 608.826.3941

Checked By: J. Buss

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-102

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
5 GP	80		22	Same as above	SP			3.6	
			24						
				Same as above. Wet at 27.					
			26	▽					
6 GP	83		28					3.0	
			30	Same as above. Augers used from 30 to 35.5 feet, cuttings were logged for description.					
			32						
			34						
				End of boring at 35.5 feet.					
			36						
			38						
			40						
			42						
			44						
			46						

SOIL BORING WELL CONSTRUCTION LOG DANAWARNERELECTRIC_02541_GENERIC.GPJ RMT_CORP.GDT 2541.27 10/1/12

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-103

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Warner Electric	9/15/08	9/15/08	2541.27

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
On-Site Environmental	Direct Push	---	---	35.5	2

Boring Location:	Personnel	Drilling Equipment:
NW ¼ of NW ¼ of Section 28, T 46 R 12 E	Logged By - Ted O'Connell Driller - Tony Kapugi	Geoprobe

Civil Town/City/or Village:	County:	State:	Water Level Observations:	
Roscoe	Winnebago	Illinois	While Drilling: Date/Time	▽ Depth (ft bgs) 27
			After Drilling: Date/Time	Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
			0	**CONCRETE**		///			
1 GP	50		2	**POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM)**, fine to medium grained sand, 20% to 25% small to large gravel, 10% to 15% fines, non plastic, light yellow brown 10YR 6/4, slight odor, dry, loose.	SP-SM			2.7	
			4						
			6	**SILTY SAND (SM)**, very fine to fine grained sand, 15% to 20% fines, non plastic, very dark brown 10YR 2/2, odor, slightly moist.	SM				
2 GP	58		8	**POORLY GRADED SAND (SP)**, very fine to fine grained sand, non plastic, yellowish brown 10YR 5/6, no odor, slightly moist.	SP			9.1	
			10	**SILTY SAND (SM)**, fine to medium grained sand, 20% to 30% fines, non plastic, dark yellowish brown 10YR 4/4, slight odor, slightly moist, medium dense.	SM				
				POORLY GRADED SAND (SP), fine grained, 5% fines, dark yellowish brown 10YR 4/6, no odor, slightly moist, loose.	SP				
3 GP	80		12	**SILTY SAND (SM)** with trace gravel, 15% to 20% fines, 5% small gravel, non plastic, dark yellowish brown 10YR 3/4, no odor, slightly moist, medium dense.	SM			8.1	
			14	**SILT (ML)**, slightly plastic, very pale brown 10YR 7/4, no odor, slightly moist.	ML				
				POORLY GRADED SAND WITH GRAVEL (SP), fine to medium grained sand, 25% to 35% small to large gravel, non plastic, yellowish brown 10YR 5/4, no odor, slightly moist, loose.	SP				
4 GP	100		16						
			18					6.3	

SOIL BORING WELL CONSTRUCTION LOG DANAWARNERELECTRIC_02541_GENERIC.GPJ RMT_CORP.GDT 2541.27 10/1/12

Signature:

Firm: TRC Environmental Corporation
708 Heartland Trail Madison WI 53717
608.826.3600
Fax 608.826.3941

Checked By: J. Buss

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-103

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
5 GP	100		22	Same as above.				1.8	
			24						
			26	Same as above					
6 GP	100		28		SP			1.8	
			30	Same as above. Augers were used from 30 to 35.5, cuttings were logged for description.					
			32						
			34						
			36	**End of Boring at 35.5 feet.**					
			38						
			40						
			42						
			44						
			46						

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-104

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Warner Electric	9/15/08	9/15/08	2541.27

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
On-Site Environmental	Direct Push	---	---	35.5	2

Boring Location:	Personnel Logged By - Driller -	Drilling Equipment:

Civil Town/City/or Village:	County:	State:	Water Level Observations:
Roscoe	Winnebago	Illinois	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
				CONCRETE					
1 GP	58			**SILTY SAND (SM)**, fine grained sand, 30% to 40% fines, slightly plastic, very dark brown 10YR 2/2, slight odor, slightly moist.	SM			20.2	
				POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM), fine to medium grained sand, 20% small to large gravel, 10% to 15% fines, non plastic, brown 10YR 4/3, slight odor, moist.	SP-SM				
			5	**SILTY SAND (SM)**, very fine to fine grained sand, 20% to 30% fines, non plastic, very dark brown 10YR 2/2, slight odor, slightly moist.	SM				
2 GP	83			**POORLY GRADED SAND (SP)**, very fine to fine grained, non plastic, dark yellowish brown10YR 3/4, odor, slightly moist, loose.	SP			5.4	
				SILTY SAND (SM) with trace clay and gravel, fine to medium grained sand, 30% fines, 5% small to large gravel, slightly plastic, dark brown 10YR 3/3, slight odor, slightly moist.	SM				
					SP-SM				
			10		ML				
3 GP	100			**POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM)**, fine grained sand, 20% to 30% fines, 15% to 25% small to large gravel, non plastic, dark yellowish brown 10YR 4/4, no odor, slightly moist.				0.9	
				SILT (SM), slightly plastic, brown 10YR 5/3, slight odor, moist.					
				POORLY GRADED SAND WITH GRAVEL (SP), fine to medium grained sand, 25% to 35% small to large gravel, non plastic, light yellowish brown 10YR 6/4, strong odor, slightly moist, loose.					
			15	Same as above					
4 GP	100				SP			2.7	
			20	Same as above. Moist from 23 - 25 feet.					
5 GP	83							0.9	

SOIL BORING WELL CONSTRUCTION LOG DANAWARNERELECTRIC 02541 GENERIC.GPJ RMT_CORP.GDT 2541.27 10/1/12

Signature:	Firm: TRC Environmental Corporation 708 Heartland Trail Madison WI 53717	608.826.3600 Fax 608.826.3941

Checked By: _____

WELL CONSTRUCTION LOG

RMT

WELL NO. MW-104

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
6 GP	100			Same as above. Wet at 26 feet.				0.0	
			30	Same as above. Augers were used from 30 to 35.5 feet, cuttings were logged for description.	SP				
			35	**End of boring at 35.5 feet.**					
			40						
			45						
			50						
			55						

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-105 Monitor Well No. MW-105

Site File Name Former Warner Electric Surface Elevation 751.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104858.0 E.(Y) 2607845.4

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	ASPHALT.			1		100				
750.2	**POORLY GRADED SAND WITH GRAVEL (SP),** very fine to fine grained sand, 30% to 40% small to large gravel, yellow (10YR 7/6), no odor, dry, dense		1							
749.2			2							
748.2	**SILT (ML)** with sand, 10% fine grained sand, very dark brown (10YR 2/2), slight odor, slightly moist.		3							
747.2			4							
746.2	**SANDY SILT (ML),** with trace small gravel, 30% to 40% fine grained sand, dark yellowish brown (10YR 3/6), no odor, moist.		5							
745.2			6							
744.2	**POORLY GRADED SAND WITH GRAVEL (SP),** medium grained sand, 35% to 45% small to large gravel, trace cobbles, trace fines, no odor, dry to slightly moist, loose.		7							
743.2			8							
742.2			9							
741.2	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 30% to 40% small to large gravel, trace cobbles, trace fines, light yellow brown (10YR 6/4), no odor, loose.		10	2		100				

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IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-105 Monitor Well No. MW-105

Site File Name Former Warner Electric Surface Elevation 751.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104858.0 E.(Y) 2607845.4

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
739.2			12							
738.2			13							
737.2			14							
736.2			15							
735.2			16							
734.2			17							
733.2			18							
732.2			19							
731.2	**SILTY SAND (SM),** 20% - 30% fine to medium grained sand, dark yellowish brown (10YR 4/4), no odor, slightly moist.		20	3		100				
730.2	**WELL GRADED SAND WITH GRAVEL (SW),** fine to coarse grained sand, 30% to 40% small to large gravel, trace cobbles, trace fines, light yellow brown (10YR 6/4), no odor, loose.		21							

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-105 Monitor Well No. MW-105

Site File Name Former Warner Electric Surface Elevation 751.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104858.0 E.(Y) 2607845.4

Latitude ___ ° ___ ' ___ " Longitude ___ ° ___ ' ___ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
728.2			23							
727.2			24							
726.2			25	4		100				
725.2			26							
724.2	**POORLY GRADED SAND (SP)**, fine grained, light yellowish brown (10YR 6/4), no odor, wet, slightly dense.		27							
723.2			28							
722.2	As above, very fine grained sand, yellowish brown (10YR 5/6).		29							
721.2	As above, with 25% - 35% small to medium gravel.		30	5		20				
720.2			31							
719.2			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-105 Monitor Well No. MW-105

Site File Name Former Warner Electric Surface Elevation 751.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104858.0 E.(Y) 2607845.4

Latitude ____° ____' ____" Longitude ____° ____' ____"

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
717.2			34							
716.2	E.O.B. at 35 feet bgs.		35							

(950226)

IL_EPA_FIELD_BORING_LOG 2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-106 Monitor Well No. MW-106

Site File Name Former Warner Electric Surface Elevation 754.0 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104932.1 E.(Y) 2607725.3

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
	SILTY SAND WITH GRAVEL (SM), fine to medium grained sand, 20% fines, 20% small to large gravel, non plastic, brown (10YR 5/3), slight odor, slightly moist.			1		80				
753.0	**SANDY LEAN CLAY (CL)** with gravel, 20% to 30% medium grained sand, 5% to 10% small to large gravel, very dark brown (10YR 2/2) with blue gray material, no odor, moist.		1							
752.0			2							
751.0			3							
750.0	As above, no blue gray material.		4							
749.0			5	2		100				
748.0	**SILTY SAND WITH GRAVEL (SM),** fine to medium grained, 20% fines, 15% small to large gravel, dark yellowish brown (10YR 3/4), no odor, moist.		6							
747.0	**SANDY SILT (ML),** 25% very fine to fine grained sand, very dark brown (10YR 2/2), no odor, moist, soft.		7							
746.0			8							
745.0			9							
744.0	**SILTY SAND WITH GRAVEL (SM),** 20% to 30% small to large gravel, 15% to 25% fines, very dark brown (10YR 2/2), no odor, moist.		10	3		100				

(950226)

IL_EPA_FIELD_BORING_LOG_2003_025411W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-106 Monitor Well No. MW-106

Site File Name Former Warner Electric Surface Elevation 754.0 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104932.1 E.(Y) 2607725.3

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
742.0	**SILT (ML),** yellowish brown (10YR 5/6), no odor, moist.		12							
741.0	**SILT (ML),** with trace small to large gravel, no odor, moist.		13							
740.0	**POORLY GRADED SAND WITH GRAVEL (SP),** fine to medium grained sand, 25% to 35% small to large gravel, sub rounded, trace cobbles, dark yellowish brown (10YR 4/4), slightly moist, loose.		14							
739.0			15	4		100				
738.0			16							
737.0			17							
736.0			18							
735.0			19							
734.0			20	5		100				
733.0			21							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-106 Monitor Well No. MW-106

Site File Name Former Warner Electric Surface Elevation 754.0 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104932.1 E.(Y) 2607725.3

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
731.0			23							
730.0			24							
729.0			25	6		100				
728.0			26							
727.0	As above, medium to coarse grained sand, trace gravel, yellowish brown (10YR 5/4), no odor, wet,		27							
726.0			28							
725.0			29							
724.0	As above, medium grained sand, no gravel, large cobbles present at 30 feet.		30	7		100				
723.0			31							
722.0			32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-106 Monitor Well No. MW-106

Site File Name Former Warner Electric Surface Elevation 754.0 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104932.1 E.(Y) 2607725.3

Latitude ____° ____' ____" Longitude ____° ____' ____"

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
720.0			34							
719.0	E.O.B. at 35 feet bgs.		35							

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-107 Monitor Well No. MW-107

Site File Name Former Warner Electric Surface Elevation 754.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104997.6 E.(Y) 2607592.7

Latitude ____° ____' ____" Longitude ____° ____' ____"

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
753.2	**POORLY GRADED SAND WITH GRAVEL (SP),** medium to fine grained sand, 25% to 35% small to large gravel, sub-rounded, yellowish brown (10YR 5/4), slight odor, slightly moist to moist, loose.		1	1		80				
752.2			2							
751.2			3							
750.2			4							
749.2			5	2		80				
748.2	**SANDY LEAN CLAY WITH GRAVEL (CL),** 20% to 30% medium grained sand, 10% to 20% small to medium gravel, brown (10YR 4/3), slight odor, moist.		6							
747.2	**SILTY SAND WITH GRAVEL (SM),** 25% to 35% fines, 5% to 10% small to medium gravel, dark yellowish brown (10YR 4/4), no odor, moist, loose .		7							
746.2			8							
745.2	**POORLY GRADED SAND WITH GRAVEL (SP),** fine to medium grained sand, 30% to 40% small to large gravel, dark yellowish brown (10YR 4/4), no odor, moist, loose .		9							
744.2	**WELL GRADED GRAVEL WITH SAND (GW),** small to large gravel, 30% medium grained sand, trace cobbles, yellowish brown (10YR 5/4), no odor, moist, loose.		10	3		100				

(950226)

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-107 Monitor Well No. MW-107

Site File Name Former Warner Electric Surface Elevation 754.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104997.6 E.(Y) 2607592.7

Latitude ° ' " Longitude ° ' "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL
G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
742.2			12							
741.2			13							
740.2			14							
739.2			15	4		100				
738.2	**POORLY GRADED SAND WITH GRAVEL (SP)**, medium to fine grained sand, 30% small to medium gravel, 5% to 10% fines, brown (10YR 5/3), no odor, dry, loose.		16							
737.2			17							
736.2			18							
735.2			19							
734.2	As above, 20% to 25% gravel, moist with cobbles.		20	5		100				
733.2			21							

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IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-107 Monitor Well No. MW-107

Site File Name Former Warner Electric Surface Elevation 754.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104997.6 E.(Y) 2607592.7

Latitude ____° ____' ____" Longitude ____° ____' ____"

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
731.2			23							
730.2			24							
729.2			25	6		100				
728.2			26							
727.2			27							
	As above, 10% to 15% gravel.									
726.2			28							
725.2			29							
724.2	As above, brown (10YR 4/3), moist to very moist.		30	7		40				
723.2			31							
722.2	As above, wet.		32							

(950226)

IL_EPA_FIELD_BORING_LOG_2003 02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Illinois Environmental Protection Agency — Field Boring Log

Site File No. _____ County Winnebago Boring No. MW-107 Monitor Well No. MW-107

Site File Name Former Warner Electric Surface Elevation 754.2 Completion Depth 35.0

Fed. ID. No. _____ Auger Depth _____ Rotary Depth _____

Quadrangle _____ Sec. 28 T. 46 R. 2E Date: Start 2/2/10 Finish 2/2/10

UTM (or State Plane) Coord. N.(X) 2104997.6 E.(Y) 2607592.7

Latitude ____ ° ____ ' ____ " Longitude ____ ° ____ ' ____ "

Boring Location _____

Drilling Equipment Mini Sonic

PERSONNEL

G - Ted O'Connell
D - Jason Drabek
H -
H -

Elev.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES: SAMPLE NO.	SAMPLE TYPE	SAMPLE RECOVERY (%)	PENETROMETER	N VALUES (BLOW COUNTS)	OVA or HNU READINGS	REMARKS
720.2			34							
719.2	E.O.B. at 35 feet bgs.		35							

(950226)

IL_EPA_FIELD_BORING_LOG_2003_02541W ILEPA.GPJ IL_EPABW.GDT 4/13/10

Appendix B

Waste Disposal Information

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NONE REQUIRED
2. Page 1 of: 1
3. Emergency Response Phone: (877) 518-0087
4. Manifest Tracking Number: 000586870 VES

GENERATOR

5. Generator's Name and Mailing Address:
DANA COMPANIES, LLC
5253 MCCURRY ROAD
ROSCOE, IL 61073
Generator's Phone: 608 826-3859

Generator's Site Address (if different than mailing address): SAME

6. Transporter 1 Company Name: VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: NJD083631369

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
VEOLIA ES TECHNICAL SOLUTIONS,
W124 N9451 BOUNDARY
MENOMONEE FALLS, WI 53051
Facility's Phone: 262 255-6656
U.S. EPA ID Number: WID000396714 8

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON-REGULATED MATERIAL, NON-RCRA, NON-DOT., (SOIL)	28	DM	22400	P	NONE		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
ER Service Contracted by VESTS + ER SERVICES CONTRACTED BY VESTS OU
36180 WI FIELD SERVICES + 1) W:244331 A:CWDOZLNHS

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X Dennis J. Siewert
Signature: X
Month Day Year: 1 1 2 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kenneth Grunnert
Signature:
Month Day Year: 1 1 2 12

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: ROBERT L. KANN JR.
Signature:
Month Day Year: 01 16 12

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY'S COPY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NONEREQUIRED	1	(877) 818-0087	000586871 VES

GENERATOR

5. Generator's Name and Mailing Address
DANA COMPANIES, LLC
5253 MCCURRY ROAD
ROSCOE, IL 61073

Generator's Site Address (if different than mailing address)
SAME

Generator's Phone: 608 826-3651

6. Transporter 1 Company Name
VEOLIA ES TECHNICAL SOLUTIONS

U.S. EPA ID Number
NJD066631369

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS
W124 N9451 BOUNDARY
MENOMONEE FALLS, WI 53051

U.S. EPA ID Number
WID000396748

Facility's Phone: 262 255-6655

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON-REGULATED MATERIAL, NON-RCRA, NON-DOT (SOIL)	27	DM	22950	P	NONE
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
ER Service Contracted by VESTS -I- ER SERVICES CONTRACTED BY VESTS OU
36160 WI FIELD SERVICES -I- 1) W:244331 A:CWDOZLNHS

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X DENNIS J SIEWERT — Signature: X — Month 1 Day 12 Year 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kenneth Guarnieri — Signature: — Month 1 Day 12 Year 12

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: ROBERT L. KAHN JR. — Signature: — Month 01 Day 16 Year 12

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY'S COPY

Veolia ES Technical Solutions L.L.C.

WASTESTREAM INFORMATION PROFILE

Disposal Code

|__| Recertification

|__| Veolia ES Location MENOMONEE FALLS OFFICE (OFFICE) MENOMONEE FALLS (CITY) WI (ST) |552 | 165 |
|__| Invoice Address

Veolia ES TSDF requested ____ Technology requested _____ Generator No. 585364 Generator EPA ID No. NONEREQUIRED

1. Generator Name DANA COMPANIES, LLC. Generator State No. _____
Address 5253 MCCURRY ROAD State Wastestream No. _____
City ROSCOE State IL Country US ZIP 61073 ____
NAICS(SIC) Code 9999 _____ _____ _____ Source G09 Origin 1 Form W319 System Type _____

---

2. Waste Name NON-HAZARDOUS SOIL BORINGS Lab or Waste Area _____
3. Process Generating Waste
soil borings for testing
4. Shipping Name NON-REGULATED MATERIAL, NON-RCRA. NON-DOT.
Hazard Class NONE UN/NA No. NONE PG ___ RQ amt 0 lb Waste: N PIH: N IH: N DWW: N P: N
RQ Des: 1. _____ 2. _____
DOT Des: 1. SOIL 2. _____
5. Waste Codes NONE _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
Wastewater _____ Non Wastewater X Sub Category _____ Mix: N Sol: N

---

6. Physical and chemical properties:

pH	Specific Gravity	Flash Point(F)	Solids	
a ___ < 2	a ___ <.8	a ___ < 80	0 - 0% suspended	0 - 0 % ash
__ 2 - 5	b ___ .8 - 1.0	b ___ 80 - 100	0 - 0% settleable	0 - 0 % water solubili
X 5 - 9	c ___ 1.0	c ___ 100 - 140	0 - 0% dissolved	0 - 0 BTU/lb
d ___ 9 - 12.5	d ___ 1.0 - 1.2	d ___ 140 - 200		
e ___ > 12.5	e ___ > 1.2	e X > 200		Free Liquid 0 - 5 %
____ - ____ exact	____ - ____ exact	f ___ no flash ____ - ____ exact		VOC 0 - 0 %

Physical State	Hazardous Characteristics		Odor
s X solid	a ___ air reactive	r ___ radioactive or NRC regulated	a none ____
m ___ semi-solid	w ___ water reactive	s ___ shock sensitive	b mild ____
l ___ liquid	c ___ cyanide reactive	t ___ temp sensitive	c strong ____
p ___ pumpable semi-solid	f ___ sulfide reactive	m ___ polymerization/monomer	describe _____
f ___ flowable powder	e ___ explosive	n ___ OSHA carcinogen	
g ___ gas	o ___ oxidizing acid	i ___ infectious	Halogens
a ___ aerosol	p ___ peroxide former	h ___ inhalation hazard	Br .0 - .0 % Bromine
r ___ pressurized liquid		Zone: _	Cl .0 - .0 % Chlorine
d ___ debris per 40 CFR 268.45			F .0 - .0 % Fluorine
h ___ sharps			I .0 - .0 % Iodine
q ___ pumpable liquid			

Layers: | a ____ multilayered: b ____ bi-layered: c ___X single phase |

	Top Layer	Second Layer	Bottom Layer	Color
Viscosity by Layer:	___ high(syrup)	___ high(syrup)	___ high(syrup)	BLK
	___ medium(oil)	___ medium(oil)	___ medium(oil)	___
	___ low(water)	___ low(water)	___ low(water)	_____
	X solid	___ solid	___ solid	

WIP NO. 244331

Veolia ES Technical Solutions L.L.C.

WASTESTREAM INFORMATION PROFILE

'Used oil y/n ___ HOC < 1000 ppm ___ HOC > 1000 ppm ___

7. Chemical Composition [M=Marine Pollutant, S=Severe Marine Pollutant, O=Ozone Depleting Substance, U=Underlying Hazardous Constituent, B=Benzene NESHAP, T=TRI Chemical, C=OSHA Carcinogen]

Constituents	Ranges		Units
SOIL	100.00	100.00	%

Other:

8. Is the wastestream being imported into the USA? Yes __ No X
9. Does the wastestream contain PCBs regulated by 40CFR? Yes __ No X
   PCB Concentration .00 ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes __ No X
11. Is the wastestream from an industry regulated under Benzene NESHAP? Yes __ No X
   If yes:
   Is the wastestream subject to Notification/Control Requirements? Yes __ No X
   Benzene Concentration .00 ppm
   Does it contain >= 10% water? Yes __ No X
   What is the TAB at your facility? .00 Mg/Yr
12. Is the wastestream subject to RCRA subpart CC controls? Yes __ No X
   Volatile Organic Concentration .00 ppmw
   CC Approved Analytical Method? Yes __ No X
   Generator Knowledge? Yes __ No X
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes __ No X

14. Container Information :

Packaging: _____ Type/Size: __ _____
_____ Type/Size: __ _____

Shipping Frequency: Units .00 Per Day _ Per Week _ Per Month _ Per Qtr _ Per Year _ One Time _
UOM _____ DESCRIPTION: _____

15. Additional Information :

16. Product Reclaim

Does Generator want material back (TOLL)? Yes _ No _
If Yes, what is the Generator's product specification?

Constituents	Range	Units

APHA Color ___ Other _____
Is the waste: grain _ or synthetic _ Ethanol? SDA Formula No._____
Have TTB taxes been paid on the contained ethanol and eligible for rebate? ___
Transportation Provided By: _ Veolia _ Generator _ Other
Returned in: _ Bulk (_ T/T _ T/C _ ISO) _ Drums _ Other

WIP NO. 244331

Veolia ES Technical Solutions L.L.C.

WASTESTREAM INFORMATION PROFILE

Describe the application for the solvent:

Additional Information:

GENERATOR CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

Cindy B. Campbell	419-568-1735	12/20/11
Name(Print or Type)	Phone	Date
Signature on File	Mgr. Remediation	
Signature	Title	

If approved for management, Veolia ES has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

WIP NO. 244331

Appendix C

Soil Vapor Extraction Laboratory Test Results

Appendix D

Groundwater Laboratory Test Results